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| NEWS | 1 | | Web Page for STN Seminar Schedule - N. America |
| NEWS | 2 | MAY 01 | New CAS web site launched |
| NEWS | 3 | MAY 08 | CA/CAPplus Indian patent publication number format defined |
| NEWS | 4 | MAY 14 | RDISCLOSURE on STN Easy enhanced with new search and display fields |
| NEWS | 5 | MAY 21 | BIOSIS reloaded and enhanced with archival data |
| NEWS | 6 | MAY 21 | TOXCENTER enhanced with BIOSIS reload |
| NEWS | 7 | MAY 21 | CA/CAPplus enhanced with additional kind codes for German patents |
| NEWS | 8 | MAY 22 | CA/CAPplus enhanced with IPC reclassification in Japanese patents |
| NEWS | 9 | JUN 27 | CA/CAPplus enhanced with pre-1967 CAS Registry Numbers |
| NEWS | 10 | JUN 29 | STN Viewer now available |
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| NEWS | 12 | JUL 02 | LEMBASE coverage updated |
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| NEWS | 14 | JUL 02 | SCISEARCH enhanced with complete author names |
| NEWS | 15 | JUL 02 | CHEMCATS accession numbers revised |
| NEWS | 16 | JUL 02 | CA/CAPplus enhanced with utility model patents from China |
| NEWS | 17 | JUL 16 | Caplus enhanced with French and German abstracts |
| NEWS | 18 | JUL 18 | CA/CAPplus patent coverage enhanced |
| NEWS | 19 | JUL 26 | USPATFULL/USPAT2 enhanced with IPC reclassification |
| NEWS | 20 | JUL 30 | USGENE now available on STN |
| NEWS | 21 | AUG 06 | CAS REGISTRY enhanced with new experimental property tags |
| NEWS | 22 | AUG 06 | BEILSTEIN updated with new compounds |
| NEWS | 23 | AUG 06 | FSTA enhanced with new thesaurus edition |
| NEWS | 24 | AUG 13 | CA/CAPplus enhanced with additional kind codes for granted patents |
| NEWS | 25 | AUG 20 | CA/CAPplus enhanced with CAS indexing in pre-1907 records |
| NEWS | 26 | AUG 27 | Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB |
| NEWS | 27 | AUG 27 | USPATOLD now available on STN |
| NEWS | 28 | AUG 28 | CAS REGISTRY enhanced with additional experimental spectral property data |
| NEWS EXPRESS | 29 | JUNE 2007: | CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007. |
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DICTIONARY FILE UPDATES: 28 AUG 2007 HIGHEST RN 945714-55-6

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=> E AL-8810/CN

| | | |
|-----|-------|--|
| E1 | 1 | AL-7SI-MG/CN |
| E2 | 1 | AL-8.1U-1ZR/CN |
| E3 | 0 --> | AL-8810/CN |
| E4 | 1 | AL-8FE-2ZR/CN |
| E5 | 1 | AL-9021/CN |
| E6 | 1 | AL-9052/CN |
| E7 | 1 | AL-905XL/CN |
| E8 | 1 | AL-9U/CN |
| E9 | 1 | AL-AAP 3/CN |
| E10 | 1 | AL-AD-1/CN |
| E11 | 1 | AL-ADHESION-C/CN |
| E12 | 1 | AL-AMYLOID 142/85 (34-ALANINE) (HUMAN SPLEEN)/CN |

=> E al-8810

| | | |
|-----|-------|---------------------------------|
| E1 | 1 | AL,ZRC/BI |
| E2 | 1 | AL,ZRO2/BI |
| E3 | 0 --> | AL-8810/BI |
| E4 | 6 | ALA/BI |
| E5 | 4 | ALA1/BI |
| E6 | 3 | ALA1.FWDARW./BI |
| E7 | 3 | ALA1.FWDARW.6G/BI |
| E8 | 3 | ALA1.FWDARW.6GAL/BI |
| E9 | 2 | ALA1.FWDARW.6GALA/BI |
| E10 | 2 | ALA1.FWDARW.6GALA1/BI |
| E11 | 2 | ALA1.FWDARW.6GALA1.FWDARW./BI |
| E12 | 2 | ALA1.FWDARW.6GALA1.FWDARW.6G/BI |

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=> E ?8810/CN
E1      1      ?,2':6',?''-TERNAPHTHALENE, 1,1'',2,2'',3,3'',4,4'',4A,4''A,
          5,5'',6,6'',7,7'',8,8'',8A,8''A-EICOSAHYDRO-, STEREOISOMER/C
          N
E2      1      ?,2':7',?''-TERNAPHTHALENE, 1,1'',2,2'',3,3'',4,4'',4A,4''A,5
          ,5'',6,6'',7,7'',8,8'',8A,8''A-EICOSAHYDRO-, STEREOISOMER/CN
E3      0 --> ?8810/CN
E4      1      ?H-BENZOTRIAZOLE, PHENYL-/CN
E5      1      ?H-CYCLOHEPTA(C) FURAN/CN
E6      1      A/CN
E7      1      A & M POLYSTYRENE 679/CN
E8      1      A (EC:5.99.1.-) (RICKETTSIA CONORI STRAIN MALISH 7 GENE PARC
          )/CN
E9      1      A (HUMAN PROTEIN TSTA3 (TISSUE SPECIFIC TRANSPLANTATION ANTI
          GEN P35B) GENE PLUS FLANKS)/CN
E10     1      A (SHIGELLA FLEXNERI STRAIN 301 GENE SF0662)/CN
E11     1      A (SPODOPTERA LITURA NUCLEOPOLYHEDROVIRUS STRAIN G2)/CN
E12     1      A / G SPECIFIC ADENINE GLYCOSYLASE (PSEUDOMONAS AERUGINOSA S
          TRAIN PAO1 GENE MUTY)/CN

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=> S ?8810/CN
LEFT TRUNCATION IGNORED FOR FILE 'REGISTRY'
L1      0 8810/CN
Left truncation is not valid in the specified search field in the
specified file. The term has been searched without left truncation.
Examples: '?TERPEN?' would be searched as 'TERPEN?' and '?FLAVONOID'
would be searched as 'FLAVONOID.'

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=> File caplus
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FULL ESTIMATED COST          8.55      8.76

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 FILE LAST UPDATED: 29 Aug 2007 (20070829/ED)

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=> S AL-8810
      1010256 AL

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5507 ALS
1015450 AL
 (AL OR ALS)
145 8810
L2 21 AL-8810
 (AL(W) 8810)

=> d L2 1 full
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The following are valid formats:

ABS ----- GI and AB
ALL ----- BIB, AB, IND, RE
APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data and PI table (default)
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CBIB ----- AN, plus Compressed Bibliographic Data
CLASS ----- IPC, NCL, ECLA, FTERM
DALL ----- ALL, delimited (end of each field identified)
DMAX ----- MAX, delimited for post-processing
FAM ----- AN, PI and PRAI in table, plus Patent Family data
FBIB ----- AN, BIB, plus Patent FAM
IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- ALL, plus Patent FAM, RE
PATS ----- PI, SO
SAM ----- CC, SX, TI, ST, IT
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 SCAN must be entered on the same line as the DISPLAY,
 e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB, CLASS

IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels
IBIB ----- BIB, indented with text labels
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ISTD ----- STD, indented with text labels

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OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations

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HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
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HITRN ----- HIT RN and its text modification
HITSTR ----- HIT RN, its text modification, its CA index name, and
 its structure diagram
HITSEQ ----- HIT RN, its text modification, its CA index name, its
 structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
 its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
 structure diagram, plus NTE and SEQ fields
KWIC ----- Hit term plus 20 words on either side
OCC ----- Number of occurrence of hit term and field in which it occurs

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ENTER DISPLAY FORMAT (BIB):all

L2 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:131381 CAPLUS
DN 146:395187
ED Entered STN: 06 Feb 2007
TI Identification of an antagonist that selectively blocks the activity of prostamides (prostaglandin-ethanolamides) in the feline iris
AU Woodward, D. F.; Krauss, A. H.; Wang, J. W.; Protzman, C. E.; Nieves, A. L.; Liang, Y.; Donde, Y.; Burk, R. M.; Landsverk, K.; Struble, C.
CS Department of Biological Sciences, Allergan, Inc., Irvine, CA, USA
SO British Journal of Pharmacology (2007), 150(3), 342-352
CODEN: BJPCBM; ISSN: 0007-1188
PB Nature Publishing Group
DT Journal
LA English
CC 1-12 (Pharmacology)
Section cross-reference(s): 2
AB The prostamides (prostaglandin-ethanolamides) and prostaglandin (PG) glyceryl esters are biosynthesized by COX-2 from the resp. endocannabinoids anandamide and 2-arachidonyl glycerol. Agonist studies suggest that their pharmacologies are unique and unrelated to prostanoid receptors. This concept was further investigated using antagonists. The isolated feline iris was used as a key preparation, where prostanoid FP receptors and prostamide activity co-exist. Activity at human recombinant FP and other prostanoid receptors was determined using stable transfectants. In the feline iris, AGN 204396 produced a rightward shift of the dose-response curves for prostamide F2 α and the prostamide F2 α analog bimatoprost but did not block the effects of PGF2 α and synthetic FP receptor agonists. Studies on human recombinant prostanoid receptors confirmed that AGN 204396 did not behave as a prostanoid FP receptor antagonist. AGN 204396 exhibited no antagonism at DP and EP1-4, but was a highly effective TP receptor antagonist. Contrary to expectation, the FP receptor antagonist AL-8810 efficaciously contracted the cat iris. AGN 204396 did not affect AL-8810 induced contractions, demonstrating that AL-8810 and AGN 204396 are pharmacol. distinct. Unlike AL-8810, the ethylamide derivative of AL-8810 was not an agonist. AL-8810 did not block prostamide F2 α activity. Finally, AGN 204396 did not block PGE2-glyceryl ester activity. The ability of AGN 204396 to selectively block prostamide responses suggests the existence of prostamide sensitive receptors as entities distinct from receptors recognizing PGF2 α and PGE2-glyceryl ester.
ST antagonist prostamide prostaglandin ethanolamide iris
IT Human
(identification of an antagonist that selectively blocks the activity of prostamides (prostaglandin-ethanolamides) in feline iris)
IT Eye
(iris; identification of an antagonist that selectively blocks the activity of prostamides (prostaglandin-ethanolamides) in feline iris)
IT Prostanoid receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type FP; identification of an antagonist that selectively blocks the activity of prostamides (prostaglandin-ethanolamides) in feline iris)
IT 363-24-6, Prostaglandin E2 551-11-1, PGF2 α
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(identification of an antagonist that selectively blocks the activity of prostamides (prostaglandin-ethanolamides) in feline iris)
IT 847665-57-0, AGN 204396

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(identification of an antagonist that selectively blocks the activity of prostamides (prostaglandin-ethanolamides) in feline iris)

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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=> D L2 2 all

L2 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2007:81398 CAPLUS

DN 146:475874

ED Entered STN: 24 Jan 2007

TI Insulin induces airway smooth muscle contraction

AU Schaafsma, D.; Gosens, R.; Ris, J. M.; Zaagsma, J.; Meurs, H.; Nelemans, S. A.

CS Department of Molecular Pharmacology, University of Groningen, Groningen, 9713 AV, Neth.

SO British Journal of Pharmacology (2007), 150(2), 136-142

CODEN: BJPCBM; ISSN: 0007-1188

PB Nature Publishing Group

DT Journal

LA English

CC 2-6 (Mammalian Hormones)

AB Background and purpose: Recently, the use of inhaled insulin formulations for the treatment of type I and type II diabetes has been approved in Europe and in the United States. For regular use, it is critical that airway function remains unimpaired in response to insulin exposure. Exptl. approach: We investigated the effects of insulin on airway smooth muscle (ASM) contraction and contractile prostaglandin (PG) production, using guinea-pig open-ring tracheal smooth muscle preps. Key results: It was found that insulin (1 nM-1 µM) induced a concentration-dependent contraction that was insensitive to epithelium removal. These sustained contractions were susceptible to inhibitors of cyclooxygenase (indomethacin, 3 µM),

Rho-kinase (Y-27632, 1 μ M) and p42/44 MAP kinase (PD-98059, 30 μ M and U-0126, 3 μ M), but not of PI-3-kinase (LY-294002, 10 μ M). In addition, insulin significantly increased PGF2 α -production which was inhibited by indomethacin, but not Y-27632. Moreover, the FP-receptor antagonist AL-8810 (10 μ M) and the EP1-receptor antagonist AH-6809 (10 μ M) strongly reduced insulin-induced contractions, supporting a pivotal role for contractile prostaglandins. Conclusions and implications: Collectively, the results show that insulin induces guinea-pig ASM contraction presumably through the production of contractile prostaglandins, which in turn are dependent on Rho-kinase for their contractile effects. The data suggest that administration of insulin as an aerosol could result in some acute adverse effects on ASM function.

- ST insulin prostaglandin signaling pathway airway smooth muscle contraction
- IT Drug delivery systems
 - (aerosols, inhalants; insulin induced airway smooth muscle contraction via prostaglandin-related multiple pathways in relation to)
- IT Respiratory system, disease
 - (inflammation; insulin induced airway smooth muscle contraction via prostaglandin-related multiple pathways in relation to)
- IT Muscle contraction
 - Respiratory system
 - Signal transduction, biological
 - Trachea (anatomical)
 - (insulin induced airway smooth muscle contraction via prostaglandin-related multiple pathways)
- IT Prostaglandins
 - RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 - (insulin induced airway smooth muscle contraction via prostaglandin-related multiple pathways)
- IT Smooth muscle
 - (of airway; insulin induced airway smooth muscle contraction via prostaglandin-related multiple pathways)
- IT Inflammation
 - (respiratory tract; insulin induced airway smooth muscle contraction via prostaglandin-related multiple pathways in relation to)
- IT Prostanoid receptors
 - RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 - (type EP1; insulin induced airway smooth muscle contraction via prostaglandin-related multiple pathways)
- IT Prostanoid receptors
 - RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 - (type FP; insulin induced airway smooth muscle contraction via prostaglandin-related multiple pathways)
- IT 551-11-1, PGF2 α 115926-52-8, Phosphatidylinositol-3 kinase 137632-07-6, p44 Mitogen-activated protein kinase 137632-08-7, p42 Mitogen-activated protein kinase 142805-58-1, MEK 182372-13-0, Rho-kinase
 - RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 - (insulin induced airway smooth muscle contraction via prostaglandin-related multiple pathways)
- IT 9004-10-8, Insulin, biological studies
 - RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (insulin induced airway smooth muscle contraction via prostaglandin-related multiple pathways)
- IT 39391-18-9, Cyclooxygenase
 - RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 - (insulin induced airway smooth muscle contraction via prostaglandin-related multiple pathways in relation to)

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

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=> D L2 3 all

L2 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:1149983 CAPLUS
DN 146:156101
ED Entered STN: 02 Nov 2006
TI Preclinical pharmacology of AL-12182, a new ocular hypotensive 11-oxa
 prostaglandin analog
AU Sharif, Najam A.; McLaughlin, Marsha A.; Kelly, Curtis R.; Xu, Shouxi;
 Crider, Julie Y.; Williams, Gary W.; Parker, Janet L.
CS Ophthalmology Discovery Research, Alcon Research, Ltd., Fort Worth, TX,
 USA
SO Journal of Ocular Pharmacology and Therapeutics (2006), 22(5), 291-309
 CODEN: JOPTFU; ISSN: 1080-7683
PB Mary Ann Liebert, Inc.
DT Journal
LA English
CC 1-12 (Pharmacology)
AB The aim of this study was to determine selected in vivo ocular properties of

AL-12182 (5,6-dihydro-4,5-didehydro-11-deoxy-11-oxa-16-(3-chlorophenoxy)- ω -tetranor-PGF $_{2\alpha}$ iso-Pr ester) and the in vitro profile of its free acid, AL-12180. Previously documented radioligand binding and functional assays involving human ciliary muscle cells (h-CM), human trabecular meshwork (h-TM) and other cells, and porcine ocular arteries were utilized. For in vivo procedures, we utilized rabbits, cats, and nonhuman primates to measure hyperemia, pupil diameter, and intraocular pressure (IOP), resp. AL-12180 exhibited the highest affinity for the FP-receptor ($K_i = 143 \pm 36$ nM) and much lower affinity for DP-, EP3-, IP-, and TP-receptors, and for several nonprostanoid receptors, enzymes, neurotransmitter uptake sites, ion channels, and other regulatory sites. AL-12180 activated phospholipase C-mediated phosphoinositide hydrolysis (potency, $EC_{50} = 13.7-42.7$ nM) through the FP-receptor in a variety of cells, such as h-CM, h-TM cells, human embryonic kidney cells expressing the cloned human ciliary body FP-receptor (HEK-FP), mouse 3T3 cells, and rat vascular smooth muscle cells. AL-8810, an FP-antagonist, blocked the effects of AL-12180 in h-CM cells ($IC_{50} = 8.7$ μ M). AL-12180 also stimulated the mobilization of intracellular Ca^{2+} ($[Ca^{2+}]_i$) in h-TM cells ($EC_{50} = 111 \pm 36$ nM), h-CM cells ($EC_{50} = 11$ nM), and in host cells expressing the cloned human ciliary body FP-receptor ($EC_{50} = 5.9 \pm 3.1$ nM). AL-12180 lacked significant agonist activity at DP-, EP2-, EP4-, IP-, and TP-receptors in cell-based assays. However, AL-12180 contracted porcine central retinal and short posterior ciliary arteries in vitro with micromolar potencies that appeared to involve TP-receptor activation. In vivo, AL-12182 elicited dose-related hyperemia in the rabbit eye, miosis in the cat eye, and ocular hypotension in the nonhuman primate eye. AL-12180 is a relatively potent and selective FP-receptor agonist whose iso-Pr ester prodrug (AL-12182) lowers IOP by as much as 40% following topical ocular dosing in a laser-induced nonhuman primate model of ocular hypertension.

- ST antiglaucoma AL12182 ocular hypotension pharmacol
- IT Bradykinin receptors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (B2; preclin. pharmacol. of AL-12182)
- IT GABA receptors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (GABAA; preclin. pharmacol. of AL-12182)
- IT Calcium channel
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (L-type; preclin. pharmacol. of AL-12182)
- IT Glutamate receptors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (NMDA-binding, channels; preclin. pharmacol. of AL-12182)
- IT Atrial natriuretic peptide receptors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (NPR-A; preclin. pharmacol. of AL-12182)
- IT Vasopressin receptors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (V1; preclin. pharmacol. of AL-12182)
- IT Biological transport
 - (calcium; preclin. pharmacol. of AL-12182)
- IT Antiglaucoma agents
 - Glaucoma (disease)
 - Human
 - Hyperemia
 - Vasodilation
 - (preclin. pharmacol. of AL-12182)
- IT Adenosine receptors
- Angiotensin AT1 receptors
- Benzodiazepine receptors
- Chloride channel
- Dopamine receptors
- Endothelin ETA receptors
- Glutamate receptors
- Muscarinic receptors

Phosphatidylinositols
Prostacyclin receptors
Sodium channel
Thromboxane receptors
 α 1-Adrenoceptors
 α 2-Adrenoceptors
 β -Adrenoceptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preclin. pharmacol. of AL-12182)

IT Prostanoid receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type DP; preclin. pharmacol. of AL-12182)

IT Prostanoid receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type EP1; preclin. pharmacol. of AL-12182)

IT Prostanoid receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type EP2; preclin. pharmacol. of AL-12182)

IT Prostanoid receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type EP3; preclin. pharmacol. of AL-12182)

IT Prostanoid receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type EP4; preclin. pharmacol. of AL-12182)

IT Prostanoid receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type FP; preclin. pharmacol. of AL-12182)

IT Opioid receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(σ -opioid; preclin. pharmacol. of AL-12182)

IT 9012-42-4, Adenylyl cyclase 85166-31-0, Inositol triphosphate
506430-87-1, Neuronal Nitric oxide synthase

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preclin. pharmacol. of AL-12182)

IT 551-11-1, PGF2 α 40665-92-7, Cloprostenol 130209-82-4,
Latanoprost 157283-68-6, Travoprost

RL: PAC (Pharmacological activity); BIOL (Biological study)
(preclin. pharmacol. of AL-12182)

IT 192992-28-2, AL-12182 748816-43-5, AL-12180

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(preclin. pharmacol. of AL-12182)

IT 7440-70-2, Calcium, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(transport; preclin. pharmacol. of AL-12182)

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
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=> D L2 4 all

L2 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:1066930 CAPLUS
 DN 145:432603
 ED Entered STN: 13 Oct 2006
 TI Combination treatment methods combination treatment methods using GnRH
 and/or GnRH analog and prostaglandin synthesis inhibitor and/or
 prostaglandin receptor antagonist
 IN Jabbour, Henry Nicolas; Millar, Robert Peter; Naor, Zvi
 PA Medical Research Council, UK
 SO PCT Int. Appl., 106pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K
 CC 2-5 (Mammalian Hormones)
 Section cross-reference(s): 1

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| | ----- | ---- | ----- | ----- | ----- |
| PI | WO 2006106311 | A2 | 20061012 | WO 2006-GB1209 | 20060403 |
| | WO 2006106311 | A3 | 20061221 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, | | | | |
| | CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, | | | | |
| | GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, | | | | |
| | KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, | | | | |
| | MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, | | | | |
| | SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, | | | | |
| | VN, YU, ZA, ZM, ZW | | | | |

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM

PRAI GB 2005-6759 A 20050402

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|---------------|-------|--|
| WO 2006106311 | ICM | A61K |
| | IPCI | A61P0035-00 [I,C]; A61K0031-40 [I,C]; A61K0038-08 [I,C]; A61P0035-00 [I,A]; A61K0031-40 [I,A]; A61K0038-09 [I,A] |
| | IPCR | A61P0035-00 [I,C]; A61P0035-00 [I,A]; A61K0031-40 [I,C]; A61K0031-40 [I,A]; A61K0038-08 [I,C]; A61K0038-09 [I,A] |
| AB | | A method of treating an individual with a condition which condition is one wherein the individual with the condition benefits from the administration of GnRH and/or a GnRH analog, the method comprising administering to the individual GnRH and/or a GnRH analog and an inhibitor of prostaglandin synthesis and/or a prostaglandin receptor antagonist. The methods of the invention also include combating a sex-hormone dependent disease in an individual, and regulating fertility in an individual. |
| ST | | GnRH analog prostaglandin synthesis receptor antagonist combination; sex hormone dependent disease treatment GnRH prostaglandin antagonist combination |
| IT | | Prostaglandins RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (E; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility) |
| IT | | Prostaglandins RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (I, amino and amido derivs.; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility) |
| IT | | Porphyria (acute intermittent; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility) |
| IT | | Prostacyclin receptors RL: BSU (Biological study, unclassified); BIOL (Biological study) (antagonists; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility) |
| IT | | Antibodies and Immunoglobulins RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (anti-IP receptor; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility) |
| IT | | Prostate gland, disease (benign hyperplasia; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility) |
| IT | | Hyperplasia (benign prostatic; combination treatment methods using GnRH and/or GnRH |

analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Drug delivery systems
(carriers; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Antitumor agents
Combination chemotherapy
Hirsutism
In vitro fertilization
Kallmann syndrome
Mammary gland, neoplasm
Ovary, neoplasm
Prostaglandin antagonists
Prostate gland, neoplasm
Signal transduction, biological
Uterus, neoplasm
(combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Gonadotropin-releasing hormone receptor
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Carboxylic acids, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Sex hormones
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(diseases dependent on; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Uterus, disease
(endometriosis; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Contraceptives
Fertility
(female; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Reproductive system, disease
(hypogonadism; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Uterus, neoplasm
(leiomyoma; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Ovary, disease
(polycystic; combination treatment methods using GnRH and/or GnRH

analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Puberty disorders
(precocious puberty; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Ovarian cycle
(premenstrual syndrome; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Sexual disorders
(sex offender; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Disease, animal
(sex-hormone dependent; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Prostaglandins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(synthesis, inhibitors; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Prostanoid receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type EP, antagonists; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Prostanoid receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type EP1; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Prostanoid receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type EP2; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Prostanoid receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type EP3; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Prostanoid receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type EP4; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Prostanoid receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type FP, antagonists; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT Acne
(vulgaris; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT 64603-03-8, AL 3138
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(AL 3138; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT 551-11-1, PGF2 α 78919-13-8, Iloprost
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(GnRH receptors response to; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT 130751-52-9 773143-90-1 773143-91-2 912569-04-1 912569-05-2
RL: PRP (Properties)
(Unclaimed; combination treatment methods combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist)

IT 634586-21-3
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT 133876-97-8, Phospholipase A2 329967-85-3, Cyclooxygenase 1
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT 60-82-2, Phloretin 1848-75-5D, derivs. 9034-40-6, LH-RH 10238-21-8, Glibenclamide 51803-78-2, Nimesulide 57773-63-4, Triptorelin 57982-77-1, Buserelin 64868-63-9D, 6,9-Thiaprostacyclin, analogs 65807-02-5, Zoladex 67508-08-1 67508-09-2 69609-77-4 71125-38-7, Meloxicam 74381-53-6, Lupron 74480-23-2, AH22921X 76932-60-0, Synarel 80937-31-1, Flosulide 81443-73-4, AH23848B 88931-52-6D, derivs. 93379-83-0, FCE 22176 110140-89-1, Ridogrel 112568-12-4, Antide 120287-85-6, Cetrorelix 124904-93-4, Ganirelix 144743-92-0, Teverelix 147776-01-0 147776-06-5 147776-08-7 159044-92-5 159044-95-8 162011-90-7, Vioxx 183552-38-7, Abarelix 220810-26-4, Supprelin 228729-11-1 246246-19-5, AL-8810 261772-89-8 261772-90-1 261772-99-0 261773-00-6 261773-01-7 261773-02-8 261773-03-9 261773-04-0 261773-05-1 261773-06-2 261773-07-3 261773-08-4 261773-09-5 261773-10-8 617708-47-1 617708-48-2 617708-50-6 617708-51-7 617708-52-8 617708-53-9 744213-88-5D, derivs. 744213-90-9 745044-25-1, PHG 113 911638-05-6 911638-06-7 911758-18-4 912589-34-5 934016-19-0, FE 200486
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT 39391-18-9, Cyclooxygenase 329900-75-6, Cyclooxygenase 2
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist for treating sex-hormone dependent disease and regulating fertility)

IT 506-32-1, Arachidonic acid
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (release; combination treatment methods using GnRH and/or GnRH analog
 and prostaglandin synthesis inhibitor and/or prostaglandin receptor
 antagonist for treating sex-hormone dependent disease and regulating
 fertility)

IT 60556-70-9, 1: PN: WO2006106311 SEQID: 1 unclaimed sequence7 912589-58-3
 912589-59-4 912589-60-7 912589-61-8 912589-62-9 912589-63-0
 912589-64-1 912589-65-2 912589-66-3 912589-67-4 912589-68-5
 912589-69-6 912589-70-9 912589-71-0 912589-72-1 912589-73-2
 912589-74-3 912589-75-4 912589-76-5 912589-77-6 912589-78-7
 912589-79-8 912589-80-1 912589-81-2 912589-82-3 912589-83-4
 912589-84-5 912589-85-6 912589-86-7 912589-87-8 912589-88-9
 912603-20-4
 RL: PRP (Properties)
 (unclaimed sequence; combination treatment methods combination
 treatment methods using GnRH and/or GnRH analog and prostaglandin
 synthesis inhibitor and/or prostaglandin receptor antagonist)

=> D L2 5 all

L2 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:1043148 CAPLUS
 DN 145:370131
 ED Entered STN: 08 Oct 2006
 TI Mechanisms regulating spontaneous contractions in the bovine epididymal
 duct
 AU Mewe, Marco; Bauer, Christiane K.; Schwarz, Juergen R.; Middendorff, Ralf
 CS Institut fuer Anatomie II: Experimentelle Morphologie, Zentrum fuer
 Experimentelle Medizin, Universitaetsklinikum Hamburg-Eppendorf,
 Universitaet Hamburg, Hamburg, D-20246, Germany
 SO Biology of Reproduction (2006), 75(4), 651-659
 CODEN: BIREBV; ISSN: 0006-3363
 PB Society for the Study of Reproduction
 DT Journal
 LA English
 CC 2-9 (Mammalian Hormones)
 AB Muscular autorhythmicity provides propulsion of spermatozoa through the
 epididymal duct, thereby ensuring sperm maturation. In the present study,
 the mechanisms underlying the bovine epididymal spontaneous phasic
 contractions (SCs) were analyzed by using muscle-tension recording and
 patch-clamp techniques. SCs were recorded from the caput, the corpus, and
 the proximal cauda region and found to be predominantly myogenic in
 origin. Removal of the luminal fluid induced a burst-like contraction
 pattern, and removal of the epithelium, a complete loss of SCs.
 Application of nifedipine, but not heparin and cyclopiazonic acid,
 suppressed SCs, indicating that influx of Ca²⁺ through L-type Ca²⁺
 channels, but not Ca²⁺ release from intracellular stores, was crucial for
 maintaining SCs. The prostaglandin-endoperoxide synthase 2 (PTGS2)
 inhibitor NS-398 caused a region-dependent decrease in SCs and tone.
 These effects were mimicked by the mitogen-activated protein kinase (MAPK)
 kinase inhibitor PD-98059. Similarly, the prostaglandin F2alpha
 (PGF2alpha)-receptor antagonist AL-8810 reduced SC
 generation, whereas PGF2alpha induced SC-like activity in
 epithelium-denuded segments. Cell-isolation expts. revealed the existence
 of three morphol. different types of contractile cells, which also showed
 distinct biophys. properties: typical smooth muscle cells in the cauda,
 myofibroblast-like cells all along the duct, and atypical muscle cells
 (ATMs) with filament-like spurs in all regions with SCs. These data
 suggest that the bovine epididymal autorhythmicity is based on an
 epithelial PTGS2-dependent release of (an) excitatory prostaglandin(s) and
 a MAPK-dependent activation of L-type Ca²⁺ channels in the contractile
 cells. ATM cells may provide elec. coupling between myofibroblasts, which
 is essential for the generation of regular myogenic activity.

ST epididymis contraction sperm motility prostaglandin endoperoxide synthase
PGF2alpha signaling; calcium channel MAP kinase prostaglandin epididymis
contraction signaling

IT Calcium channel
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(L-type; prostaglandin related mechanisms regulating spontaneous
contractions in bovine epididymal duct)

IT Muscle
(atypical cells; prostaglandin related mechanisms regulating
spontaneous contractions in bovine epididymal duct)

IT Epithelium
(epididymal; prostaglandin related mechanisms regulating spontaneous
contractions in bovine epididymal duct)

IT Epididymis
(epithelium; prostaglandin related mechanisms regulating spontaneous
contractions in bovine epididymal duct)

IT Biological transport
(influx; prostaglandin related mechanisms regulating spontaneous
contractions in bovine epididymal duct)

IT Fibroblast
(myofibroblast; prostaglandin related mechanisms regulating spontaneous
contractions in bovine epididymal duct)

IT Cell morphology
Epididymis
Muscle contraction
Signal transduction, biological
Sperm motility
(prostaglandin related mechanisms regulating spontaneous contractions
in bovine epididymal duct)

IT Muscle
(smooth; prostaglandin related mechanisms regulating spontaneous
contractions in bovine epididymal duct)

IT Prostanoid receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type FP; prostaglandin related mechanisms regulating spontaneous
contractions in bovine epididymal duct)

IT 551-11-1, Prostaglandin F2α 7440-70-2, Calcium, biological studies
137632-08-7, Mitogen-activated protein kinase 2 329900-75-6,
Prostaglandin-endoperoxide synthase 2
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prostaglandin related mechanisms regulating spontaneous contractions
in bovine epididymal duct)

RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
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=> D L2 20 all

L2 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2001:77566 CAPLUS
 DN 134:126401
 ED Entered STN: 02 Feb 2001
 TI AL-3138 antagonizes FP prostanoid receptor-mediated inositol phosphates generation: comparison with some purported FP antagonists
 AU Sharif, N. A.; Crider, J. Y.; Davis, T. L.
 CS Molecular Pharmacology Unit, Alcon Research Ltd, Fort Worth, TX, 76134, USA
 SO Journal of Pharmacy and Pharmacology (2000), 52(12), 1529-1539
 CODEN: JPPMAB; ISSN: 0022-3573
 PB Royal Pharmaceutical Society of Great Britain
 DT Journal
 LA English
 CC 2-9 (Mammalian Hormones)
 Section cross-reference(s): 1
 AB The aim of this study was to pharmacol. characterize the antagonist properties of a novel prostaglandin F2 α (PGF2 α) analog (11-deoxy-16-fluoro PGF2 α ; AL-3138) using a variety of second-messenger assays of prostaglandin receptor subtypes. A detailed comparison was made between AL-3138 and some purported FP receptor antagonists such as PGF2 α dimethylamine, PGF2 α dimethylamide, glibenclamide and phloretin using the FP receptor-mediated phosphoinositide turnover assay in A7r5 rat thoracic aorta smooth muscle

cells and mouse Swiss 3T3 fibroblasts. The potency and efficacy of AL-3138 as an FP receptor agonist were: $EC_{50}=72.2\pm17.9\text{nM}$ ($E_{\text{max}}=37\%$) ($n=3$) in A7r5 cells and $EC_{50}=20.5\pm2.8\text{nM}$ ($E_{\text{max}}=33\%$) ($n=5$) in 3T3 cells. Being a partial agonist, the antagonist potency of AL-3138 against fluprostenol in A7r5 cells was determined to be: $K_i=296\pm17\text{nM}$ ($n=3$) and $K_b=182\pm44\text{nM}$ ($n=5$) ($-\log K_b=6.79\pm0.1$). AL-3138 exhibited very minimal or no antagonistic effects at EP2, EP4, DP and TP prostaglandin receptors. Both $\text{PGF}_2\alpha$ dimethylamide and $\text{PGF}_2\alpha$ dimethylamine were inactive as FP receptor antagonists, whereas phloretin and glibenclamide were very weak and had $-\log K_b$ values of 5.28 ± 0.09 ($n=3$) and 3.58 ± 0.32 ($n=3$), resp. However, phloretin antagonized functional responses of EP2 and DP prostanoid receptors, and also the V1-vasopressin receptor. AL-3138 competed for $[3\text{H}]\text{PGF}_2\alpha$ binding to FP receptors with a relatively high affinity ($IC_{50\text{high}}=312\pm95\text{nM}$) matching its functional antagonist potency. In conclusion, AL-3138 is a more potent and selective FP receptor antagonist than glibenclamide, phloretin, $\text{PGF}_2\alpha$ dimethylamide and $\text{PGF}_2\alpha$ dimethylamine and is therefore a unique and novel pharmacol. tool to help characterize FP receptor-mediated functions.

ST prostanoid receptor FP antagonist AL3138

IT Fibroblast

(AL-3138 antagonizes FP prostanoid receptor-mediated inositol phosphates generation in A7r5 rat thoracic aorta smooth muscle cells and Swiss 3T3 albino mouse fibroblasts in relation to comparison with purported FP antagonists)

IT Prostanoid receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(FP; AL-3138 antagonizes FP prostanoid receptor-mediated inositol phosphates generation in A7r5 rat thoracic aorta smooth muscle cells and Swiss 3T3 albino mouse fibroblasts in relation to comparison with purported FP antagonists)

IT Blood vessel

(smooth muscle; AL-3138 antagonizes FP prostanoid receptor-mediated inositol phosphates generation in A7r5 rat thoracic aorta smooth muscle cells and Swiss 3T3 albino mouse fibroblasts in relation to comparison with purported FP antagonists)

IT 551-11-1, $\text{PGF}_2\alpha$

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(AL-3138 antagonizes FP prostanoid receptor-mediated inositol phosphates generation in A7r5 rat thoracic aorta smooth muscle cells and Swiss 3T3 albino mouse fibroblasts in relation to comparison with purported FP antagonists)

IT 60-82-2, Phloretin 64-77-7, Tolbutamide 1156-19-0, Tolazamide 10238-21-8, Glibenclamide 40666-16-8, Fluprostenol 64603-03-8, AL 3138 67508-08-1 67508-09-2 246246-19-5, AL-8810

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(AL-3138 antagonizes FP prostanoid receptor-mediated inositol phosphates generation in A7r5 rat thoracic aorta smooth muscle cells and Swiss 3T3 albino mouse fibroblasts in relation to comparison with purported FP antagonists)

IT 60-92-4, CAMP 68247-19-8, Inositol phosphate

RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)

(AL-3138 antagonizes FP prostanoid receptor-mediated inositol phosphates generation in A7r5 rat thoracic aorta smooth muscle cells and Swiss 3T3 albino mouse fibroblasts in relation to comparison with purported FP antagonists)

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD

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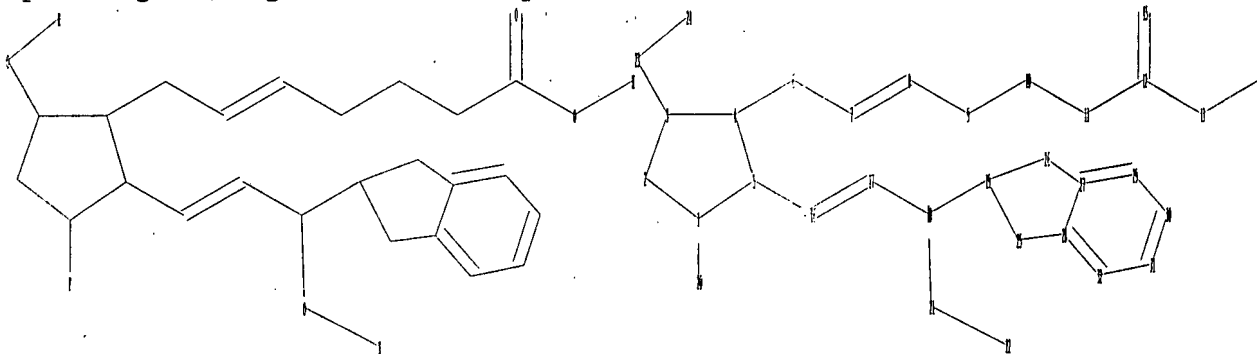
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chain nodes :

6 7 8 9 10 11 12 13 14 15 16 17 18 20 21 22 23 24

ring nodes :

1 2 3 4 5 19 25 26 27 28 29 30 31 32

chain bonds :

1-20 3-23 4-6 5-16 6-7 7-8 8-9 9-10 10-11 11-12 12-13 12-15 13-14
16-17 17-18 18-19 18-21 21-22 23-24

ring bonds :

1-2 1-5 2-3 3-4 4-5 19-25 19-26 25-28 26-27 27-28 27-29 28-32 29-30
30-31 31-32

exact/norm bonds :

1-2 1-5 2-3 3-4 3-23 4-5 18-21 19-25 19-26 25-28 26-27

exact bonds :

1-20 4-6 5-16 6-7 7-8 8-9 9-10 10-11 11-12 13-14 16-17 17-18 18-19
21-22 23-24

normalized bonds :

12-13 12-15 27-28 27-29 28-32 29-30 30-31 31-32

Match level :

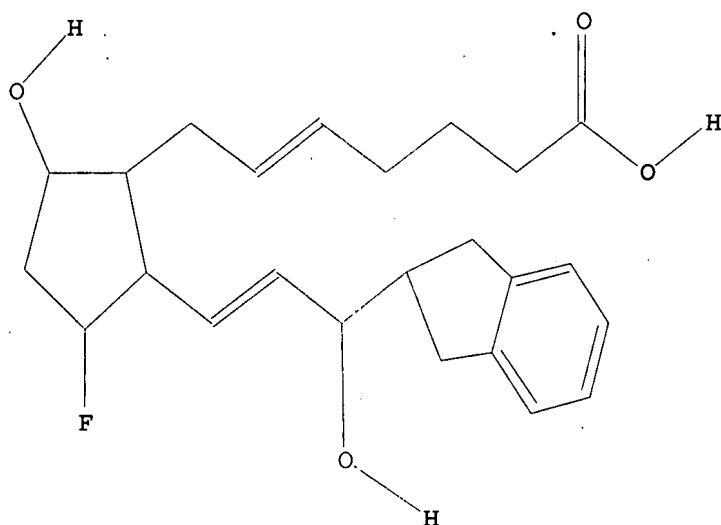
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18:CLASS 19:Atom 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:Atom
26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom

L1 STRUCTURE UPLOADED

=> D L1

L1 HAS NO ANSWERS

L1 STR



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=> s L1 FAM FULL

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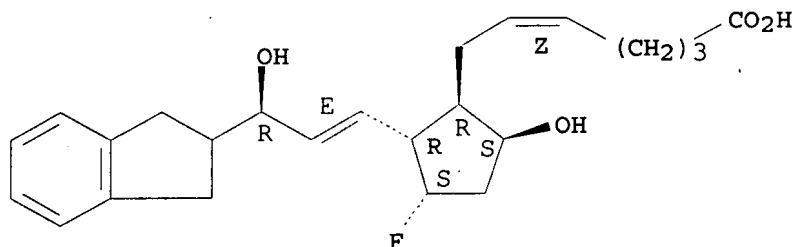
L2 1 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN 5-Heptenoic acid, 7-[(1R,2R,3S,5S)-2-[(1E,3R)-3-(2,3-dihydro-1H-inden-2-yl)-3-hydroxy-1-propenyl]-3-fluoro-5-hydroxycyclopentyl]-, (5Z)-(9CI)

MF C24 H31 F O4

Absolute stereochemistry.

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> D L2

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN
RN 246246-19-5 REGISTRY
ED Entered STN: 05 Nov 1999
CN 5-Heptenoic acid, 7-[(1R,2R,3S,5S)-2-[(1E,3R)-3-(2,3-dihydro-1H-inden-2-yl)-3-hydroxy-1-propenyl]-3-fluoro-5-hydroxycyclopentyl]-, (5Z)- (9CI)
(CA INDEX NAME)

OTHER NAMES:

CN AL 8810

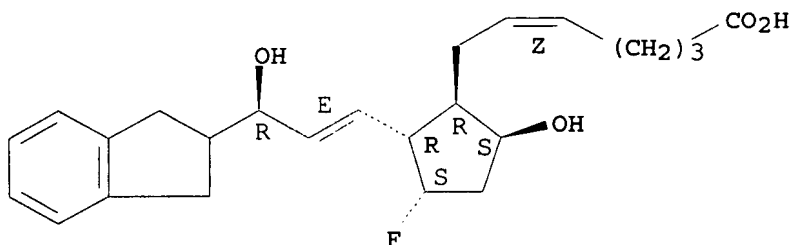
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MF C24 H31 F O4

SR CA

LC STN Files: BIOSIS, CA, CAPLUS, CHEMCATS, CSCHEM, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.
Double bond geometry as shown.



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=> E AL 8810/CN

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| E1 | 1 | AL 87, CE 3, CU 3, NI 7 (MOLAR RATIO)/CN |
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| E3 | 1 --> | AL 8810/CN |
| E4 | 1 | AL 885-20/CN |
| E5 | 1 | AL 8G/CN |

E6 1 AL 8G-ARONIX M 8530-UNIDIC 17-813-VYLON 240 COPOLYMER/CN
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 E8 2 AL 9/CN
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 E10 1 AL 9, GE 9, MG 0.2, ZN BAL./CN
 E11 1 AL 9, GE 9, ZN BAL./CN
 E12 1 AL 9.1, FE 3.6, MN 1.4, CU BAL./CN

=> S E3

L3 1 "AL 8810"/CN

=> D L3

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RN 246246-19-5 REGISTRY

ED Entered STN: 05 Nov 1999

CN 5-Heptenoic acid, 7-[(1R,2R,3S,5S)-2-[(1E,3R)-3-(2,3-dihydro-1H-inden-2-yl)-3-hydroxy-1-propenyl]-3-fluoro-5-hydroxycyclopentyl]-, (5Z)- (9CI)
 (CA INDEX NAME)

OTHER NAMES:

CN AL 8810

FS STEREOSEARCH

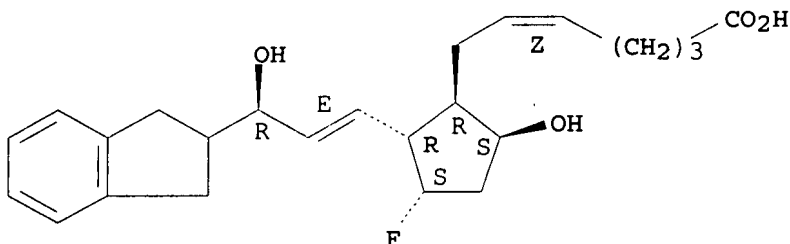
MF C24 H31 F O4

SR CA

LC STN Files: BIOSIS, CA, CAPLUS, CHEMCATS, CSCHEM, TOXCENTER, USPAT2,
 USPATFULL

Absolute stereochemistry.

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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=> S L3

L4 10 L3

=> d L4 1-10 IBIB abs

L4 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1066930 CAPLUS

DOCUMENT NUMBER: 145:432603

TITLE: Combination treatment methods combination treatment methods using GnRH and/or GnRH analog and prostaglandin synthesis inhibitor and/or prostaglandin receptor antagonist

INVENTOR(S): Jabbour, Henry Nicolas; Millar, Robert Peter; Naor, Zvi

PATENT ASSIGNEE(S): Medical Research Council, UK

SOURCE: PCT Int. Appl., 106pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2006106311 | A2 | 20061012 | WO 2006-GB1209 | 20060403 |
| WO 2006106311 | A3 | 20061221 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |

PRIORITY APPLN. INFO.: GB 2005-6759 A 20050402

AB A method of treating an individual with a condition which condition is one wherein the individual with the condition benefits from the administration of GnRH and/or a GnRH analog, the method comprising administering to the individual GnRH and/or a GnRH analog and an inhibitor of prostaglandin synthesis and/or a prostaglandin receptor antagonist. The methods of the invention also include combating a sex-hormone dependent disease in an individual, and regulating fertility in an individual.

L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:707249 CAPLUS

DOCUMENT NUMBER: 145:117453

TITLE: Embryo development and survival

INVENTOR(S): Schrick, F. Neal

PATENT ASSIGNEE(S): University of Tennessee Research Foundation, USA

SOURCE: U.S. Pat. Appl. Publ., 8 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2006162003 | A1 | 20060720 | US 2005-39662 | 20050119 |
| WO 2006078535 | A2 | 20060727 | WO 2006-US1091 | 20060113 |
| WO 2006078535 | A3 | 20061214 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2005-39662 A 20050119
AB An embryo that is transferred into the uterus of a recipient female is protected from embryotoxic effects of prostaglandin F2 α by exposing the embryo to a prostaglandin antagonist.

L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:701992 CAPLUS

DOCUMENT NUMBER: 141:218963

TITLE: IP receptor antagonists for the treatment of pathological uterine conditions

INVENTOR(S): Critchley, Hilary Octavia Dawn; Jabbour, Henry Nicolas

PATENT ASSIGNEE(S): Medical Research Council, UK

SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2004071508 | A1 | 20040826 | WO 2004-GB588 | 20040216 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|------------|--|----------|----------------|----------|
| EP 1596858 | A1 | 20051123 | EP 2004-711405 | 20040216 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |

| | | | | |
|---------------|---|----------|----------------|----------|
| JP 2006517576 | T | 20060727 | JP 2006-502277 | 20040216 |
|---------------|---|----------|----------------|----------|

| | | | | |
|---------------|----|----------|----------------|----------|
| US 2006171945 | A1 | 20060803 | US 2005-545478 | 20050815 |
|---------------|----|----------|----------------|----------|

PRIORITY APPLN. INFO.:

| | | |
|--------------|---|----------|
| GB 2003-3430 | A | 20030214 |
|--------------|---|----------|

| | | |
|---------------|---|----------|
| GB 2003-15322 | A | 20030701 |
|---------------|---|----------|

| | | |
|---------------|---|----------|
| WO 2004-GB588 | W | 20040216 |
|---------------|---|----------|

AB A method of combating a pathol. condition of the uterus in a female individual, the method comprising administering to the individual at least one agent that is an antagonist of the IP receptor and/or a PGIS

inhibitor. The pathol. condition of the uterus is uterine carcinoma, menorrhagia, dysmenorrhoea or an endometrial or myometrial pathol. condition.

L4 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:855825 CAPLUS

DOCUMENT NUMBER: 139:354462

TITLE: FP receptor antagonists or PGF2 α antagonists for treating menorrhagia

INVENTOR(S): Jabbour, Henry Nicolas; Critchley, Hilary Octavia Dawn

PATENT ASSIGNEE(S): Medical Research Council, UK

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2003089002 | A1 | 20031030 | WO 2003-GB1536 | 20030410 |
| WO 2003089002 | A9 | 20041223 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2003219327 | A1 | 20031103 | AU 2003-219327 | 20030410 |
| EP 1494715 | A1 | 20050112 | EP 2003-715136 | 20030410 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| JP 2005532295 | T | 20051027 | JP 2003-585753 | 20030410 |
| US 2006166872 | A1 | 20060727 | US 2005-511484 | 20051021 |
| PRIORITY APPLN. INFO.: | | | GB 2002-8783 | A 20020417 |
| | | | GB 2002-8785 | A 20020417 |
| | | | WO 2003-GB1536 | W 20030410 |

AB A method of treating or preventing menorrhagia in a female individual comprising administering to the individual at least one agent that prevents PGF2 α having its effect on the prostaglandin FP receptor. Optionally, an inhibitor of prostaglandin endoperoxide synthase (PGES) and/or an antagonist of EP2 or EP4 is also administered. For example, a patient with menorrhagia was treated with a FP receptor antagonist AL-3138 or AL-8810 at a dosing and frequency such that the therapeutic level of active agents at the site of treatment is maintained at a level ideally EC90 but preferably not less than EC50 throughout the treatment period. The treatment was delivered orally or more locally depending on patient acceptability, avoidance of side effects, and systemic bioavailability.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:855824 CAPLUS

DOCUMENT NUMBER: 139:354461

TITLE: FP receptor antagonists or PGF2 α antagonists for treating pathological conditions of the uterus

INVENTOR(S): Milne, Stuart Angus; Jabbour, Henry Nicolas

PATENT ASSIGNEE(S): Medical Research Council, UK

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2003089001 | A1 | 20031030 | WO 2003-GB1521 | 20030410 |
| WO 2003089001 | A8 | 20040205 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2003217066 | A1 | 20031103 | AU 2003-217066 | 20030410 |
| EP 1511514 | A1 | 20050309 | EP 2003-712454 | 20030410 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| JP 2005537225 | T | 20051208 | JP 2003-585752 | 20030410 |
| US 2007004620 | A1 | 20070104 | US 2005-511480 | 20051115 |
| PRIORITY APPLN. INFO.: | | | GB 2002-8785 | A 20020417 |
| | | | WO 2003-GB1521 | W 20030410 |

AB A method of treating or preventing a pathol. condition of the uterus in a female individual comprises administering to the individual at least one agent that prevents PGF2 α having its effect on the FP receptor. Typically, the pathol. condition is uterine cancer, fibroids or endometriosis. For example, a patient suffering from uterine cancer was administered a FP receptor antagonist AL-3138 or AL-8810 and an EP2 receptor antagonist AH-6809 at a dosing quantity and frequency such as that the therapeutic level of active agent at the site of treatment was maintained at a level ideally EC90 but preferably not less than EC50 throughout the treatment period. The treatment was delivered orally or more locally depending on patient acceptability, avoidance of side effects, and systemic bioavailability.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:814548 CAPLUS

DOCUMENT NUMBER: 140:105701

TITLE: Human ciliary muscle cell responses to FP-class prostaglandin analogs: phosphoinositide hydrolysis, intracellular Ca²⁺ mobilization and MAP kinase activation

AUTHOR(S): Sharif, Naj A.; Crider, Julie Y.; Husain, Shahid; Kaddour-Djebbar, Ismail; Ansari, Habib R.; Abdel-Latif, Ata A.

CORPORATE SOURCE: Molecular Pharmacology Unit, Alcon Research, Ltd., Fort Worth, TX, USA

SOURCE: Journal of Ocular Pharmacology and Therapeutics (2003), 19(5), 437-455
CODEN: JOPTFU; ISSN: 1080-7683

PUBLISHER: Mary Ann Liebert, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Phospholipase C induced phosphoinositide (PI) turnover, intracellular Ca²⁺ ([Ca²⁺]_i) mobilization and mitogen-activated protein (MAP) kinase activation by FP-class prostaglandin analogs was studied in normal human ciliary muscle (h-CM) cells. Agonist potencies obtained in the PI turnover assays were: travoprost acid ((+)-fluprostenol; EC₅₀ = 2.6 \pm 0.8 nM) > bimatoprost acid (EC₅₀ = 3.6 \pm 1.2 nM) > (\pm)-fluprostenol (EC₅₀

= 4.3±1.3 nM) >> prostaglandin F2α (PGF2α) (EC50 = 134±17 nM) > latanoprost acid (EC50 = 198±83 nM) > S-1033 (EC50 = 2930±1420 nM) > unoprostone (EC50 = 5590±1490 nM) > bimatoprost (EC50 = 9600±1100 nM). Agonist potencies in h-CM cells correlated well with those previously obtained for the cloned human ciliary body-derived FP receptor (r = 0.96, p< 0.001) and that present on h-TM cells (r = 0.94, p< 0.0001). Travoprost acid, PGF2α and unoprostone also stimulated [Ca2+]i mobilization in h-CM cells with travoprost acid being the most potent agonist. MAP kinase activity was stimulated in the h-CM cells with the following rank order of activity (at 100 nM): travoprost acid > PGF2α > latanoprost acid > PGD2 > bimatoprost > latanoprost = bimatoprost acid = fluprostenol > PGE2 = S-1033 > unoprostone > PGI2. The PI turnover, [Ca2+]i mobilization and MAP kinase activation induced by several of these agonists was blocked by the FP receptor antagonist, AL-8810 (11β-fluoro-15-epiindanyl PGF2α) (e.g., Ki = 5.7 μM vs. PI turnover). These studies have characterized the biochem. and pharmacol. properties of the native FP prostaglandin receptor present on h-CM cells using three signal transduction mechanism assays and a broad panel of FP-class agonist analogs (including free acids of bimatoprost, travoprost and latanoprost) and the FP receptor antagonist, AL-8810.

REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:12026 CAPLUS

DOCUMENT NUMBER: 138:298026

TITLE: Real-time intracellular Ca2+ mobilization by travoprost acid, bimatoprost, unoprostone, and other analogs via endogenous mouse, rat, and cloned human FP prostaglandin receptors

AUTHOR(S): Kelly, Curtis R.; Williams, Gary W.; Sharif, Najam A.

CORPORATE SOURCE: Molecular Pharmacology Unit, Pharmaceutical Products Research, Alcon Research, Ltd., Fort Worth, TX, USA

SOURCE: Journal of Pharmacology and Experimental Therapeutics (2003), 304(1), 238-245

CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER: American Society for Pharmacology and Experimental Therapeutics

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The ability of a number of prostaglandin F2α (PGF2α) analogs to mobilize intracellular Ca2+ [Ca2+]i and to compete for [3H]PGF2α binding to prostaglandin F2α receptors (FP) was evaluated. Radioligand binding studies measuring displacement of [3H]PGF2α by a variety of FP prostaglandin analogs yielded the following rank order of affinities: travoprost acid [(+)-16-m-trifluorophenoxy tetranor PGF2α; (+)-fluprostenol] > bimatoprost acid (17-phenyl-trinor PGF2α) » unoprostone (13,14-dihydro-15-keto-20-Et PGF2α) = bimatoprost (17-phenyl-trinor PGF2α Et amide) ≥ Lumigan (bimatoprost ophthalmic solution). In FP functional studies, travoprost acid (EC50 = 17.5-37 nM, n = 13), bimatoprost acid (EC50 = 23.3-49.0 nM, n = 6-12), unoprostone (EC50 = 306-1270 nM, n = 4-8), bimatoprost (EC50 = 3070- 3940 nM, n = 4-9), and Lumigan (EC50 = 1470-3190 nM, n = 5-9)

concentration

independently stimulated [Ca2+]i mobilization via the rat (A7r5 cells), mouse (3T3 cells), and cloned human ocular FP prostanoid receptors. The rank order of potency of these compds. at the FP receptor of the three species was similar and in good agreement with the determined binding affinities. The agonist effects of these compds. were concentration

independently

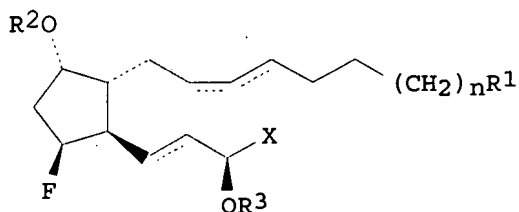
blocked by the FP receptor-selective antagonist, AL-8810 (11β-fluoro-15-epi-15-indanyl-tetranor PGF2α) (Ki = 0.6-1.3 μM). These studies have demonstrated that bimatoprost, unoprostone, and bimatoprost acid possess direct agonist activities at the rat, mouse, and human FP prostanoid receptor and that travoprost acid is the most

potent of the synthetic FP prostaglandin analogs tested.

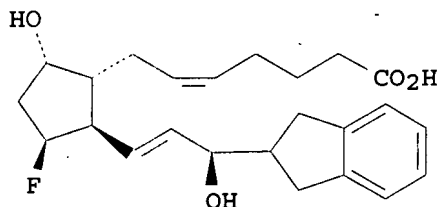
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:655093 CAPLUS
DOCUMENT NUMBER: 137:185354
TITLE: Preparation of 11 β -fluoro-15 β -hydroxy
PGF2 α analogs as FP receptor antagonists
INVENTOR(S): Sharif, Najam A.; Griffin, Brenda W.
PATENT ASSIGNEE(S): Alcon Manufacturing, Ltd., USA
SOURCE: U.S., 15 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|-------------------|-----------------|-------------|
| US 6441033 | B1 | 20020827 | US 1998-210976 | 19981214 |
| US 2003083375 | A1 | 20030501 | US 2002-202230 | 20020724 |
| US 6649655 | B2 | 20031118 | | |
| PRIORITY APPLN. INFO.: | | | US 1997-68468P | P 19971222 |
| | | | US 1998-210976 | A1 19981214 |
| OTHER SOURCE(S): | | MARPAT 137:185354 | | |
| GI | | | | |



I



II

AB PGF2 α analogs of formula I [R¹ = (substituted) CO₂H, (substituted) CONH₂, (substituted) CH₂OH, (substituted) CH₂NH₂; R², R³ = H, alkyl, acyl; n = 0, 2; X = alkyl-cycloalkyl, alkyl-heterocyclo, cycloalkyl, heterocyclo, etc.] are prepared for the antagonism of FP receptor-mediated biol. responses. Thus, II was prepared and had >10-fold higher potency than phloretin as an FP receptor antagonist.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:77566 CAPLUS
DOCUMENT NUMBER: 134:126401
TITLE: AL-3138 antagonizes FP prostanoid receptor-mediated inositol phosphates generation: comparison with some purported FP antagonists

AUTHOR(S): Sharif, N. A.; Crider, J. Y.; Davis, T. L.
CORPORATE SOURCE: Molecular Pharmacology Unit, Alcon Research Ltd, Fort
Worth, TX, 76134, USA
SOURCE: Journal of Pharmacy and Pharmacology (2000), 52(12),
1529-1539
CODEN: JPPMAB; ISSN: 0022-3573
PUBLISHER: Royal Pharmaceutical Society of Great Britain
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The aim of this study was to pharmacol. characterize the antagonist properties of a novel prostaglandin F2 α (PGF2 α) analog (11-deoxy-16-fluoro PGF2 α ; AL-3138) using a variety of second-messenger assays of prostaglandin receptor subtypes. A detailed comparison was made between AL-3138 and some purported FP receptor antagonists such as PGF2 α dimethylamine, PGF2 α dimethylamide, glibenclamide and phloretin using the FP receptor-mediated phosphoinositide turnover assay in A7r5 rat thoracic aorta smooth muscle cells and mouse Swiss 3T3 fibroblasts. The potency and efficacy of AL-3138 as an FP receptor agonist were: EC50=72.2 \pm 17.9nM (Emax=37%) (n=3) in A7r5 cells and EC50=20.5 \pm 2.8nM (Emax=33%) (n=5) in 3T3 cells. Being a partial agonist, the antagonist potency of AL-3138 against fluprostenol in A7r5 cells was determined to be: Ki=296 \pm 17nM (n=3) and Kb=182 \pm 44nM (n=5) (-log Kb=6.79 \pm 0.1). AL-3138 exhibited very minimal or no antagonistic effects at EP2, EP4, DP and TP prostaglandin receptors. Both PGF2 α dimethylamide and PGF2 α dimethylamine were inactive as FP receptor antagonists, whereas phloretin and glibenclamide were very weak and had -log Kb values of 5.28 \pm 0.09 (n=3) and 3.58 \pm 0.32 (n=3), resp. However, phloretin antagonized functional responses of EP2 and DP prostanoid receptors, and also the V1-vasopressin receptor. AL-3138 competed for [3H]PGF2 α binding to FP receptors with a relatively high affinity (IC50high=312 \pm 95nM) matching its functional antagonist potency. In conclusion, AL-3138 is a more potent and selective FP receptor antagonist than glibenclamide, phloretin, PGF2 α dimethylamide and PGF2 α dimethylamine and is therefore a unique and novel pharmacol. tool to help characterize FP receptor-mediated functions.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:547950 CAPLUS
DOCUMENT NUMBER: 131:281912
TITLE: AL-8810: a novel prostaglandin F2 α analog with selective antagonist effects at the prostaglandin F2 α (FP) receptor
AUTHOR(S): Griffin, Brenda W.; Klimko, Peter; Crider, Julie Y.; Sharif, Najam A.
CORPORATE SOURCE: Molecular Pharmacology Unit, Alcon Laboratories, Inc., Fort Worth, TX, USA
SOURCE: Journal of Pharmacology and Experimental Therapeutics (1999), 290(3), 1278-1284
CODEN: JPETAB; ISSN: 0022-3565
PUBLISHER: American Society for Pharmacology and Experimental Therapeutics
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A novel analog of prostaglandin F2 α [AL-8810; (5Z,13E)-(9S,11S,15R)-9,15-dihydroxy-11-fluoro-15-(2-indanyl)-16,17,18,19,20-pentanor-5,13-prostadienoic acid] has been discovered with uniquely low efficacy (Emax) at the endogenous prostaglandin F2 α receptors (FP receptors) of A7r5 rat thoracic aorta smooth muscle cells and Swiss mouse 3T3 fibroblasts, as assayed by stimulation of phospholipase C activity. AL-8810 has weak agonist potency (EC50) of 261 \pm 44 nM (n = 3) and Emax = 19% (relative to the full FP receptor agonist cloprostenol) in A7r5 cells and EC50 of 186 \pm 63 nM (n = 3) and Emax = 23% in 3T3 fibroblasts. AL-8810 exhibited

properties of an apparent competitive antagonist, i.e., produced parallel dextral shifts of the agonist concentration-response curves and no significant suppression of the maximal agonist-induced response, when the potent, selective FP receptor agonist fluprostenol was used. The inhibition parameters of AL-8810 were: $pA_2 = 6.68 \pm 0.23$ and 6.34 ± 0.09 ($n = 3-4$) for A7r5 cells and 3T3 cells, resp., with Schild slopes ranging from 0.80 to 0.92. AL-8810 concentration-dependently antagonized the response to 100 nM fluprostenol ($K_i = 426 \pm 63$ nM; $n = 5$) in A7r5 cells. However, even at 10 μ M concentration, AL-8810 did not significantly inhibit functional responses of TP, DP, EP2, EP4, receptor subtypes in various cell lines. AL-8810 also did not antagonize the phospholipase C-coupled V1-vasopressin receptor in A7r5 cells. These results suggest that AL-8810 is a unique, selective antagonist at the FP receptor, a heretofore unavailable pharmacol. tool that should be valuable for studying FP receptor-mediated functional responses in complex biol. systems.

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

33.94

114.75

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

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FILE 'HOME' ENTERED AT 10:16:40 ON 30 AUG 2007

=> FILE BIOSIS USPAT2 USPATFULL
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.42 | 0.42 |

FULL ESTIMATED COST

FILE 'BIOSIS' ENTERED AT 10:18:00 ON 30 AUG 2007

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=> FILE REGISTRY
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 3.83 | 4.25 |

FULL ESTIMATED COST

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DICTIONARY FILE UPDATES: 29 AUG 2007 HIGHEST RN 945828-45-5

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TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

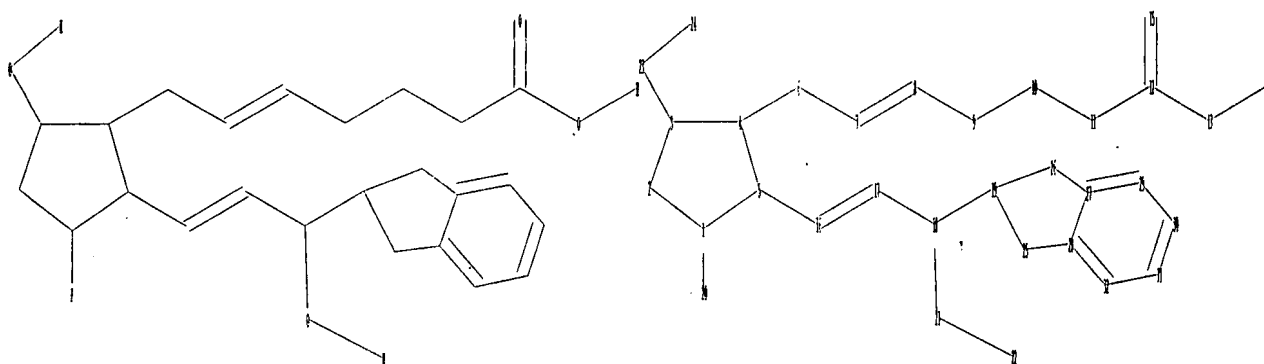
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10511480.str



chain nodes :

6 7 8 9 10 11 12 13 14 15 16 17 18 20 21 22 23 24

ring nodes :

1 2 3 4 5 19 25 26 27 28 29 30 31 32

chain bonds :

1-20 3-23 4-6 5-16 6-7 7-8 8-9 9-10 10-11 11-12 12-13 12-15 13-14
16-17 17-18 18-19 18-21 21-22 23-24

ring bonds :

1-2 1-5 2-3 3-4 4-5 19-25 19-26 25-28 26-27 27-28 27-29 28-32 29-30
30-31 31-32

exact/norm bonds :

1-2 1-5 2-3 3-4 3-23 4-5 18-21 19-25 19-26 25-28 26-27

exact bonds :

1-20 4-6 5-16 6-7 7-8 8-9 9-10 10-11 11-12 13-14 16-17 17-18 18-19
21-22 23-24

normalized bonds :

12-13 12-15 27-28 27-29 28-32 29-30 30-31 31-32

Match level :

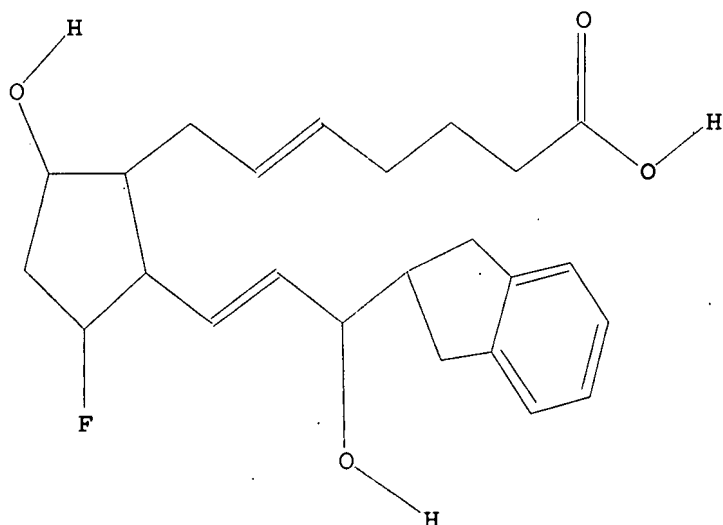
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS
18:CLASS 19:Atom 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:Atom
26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom

L1 STRUCTURE UPLOADED

=> D L1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> file biosis uspat2 uspatfull
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.90 | 5.15 |

FULL ESTIMATED COST

FILE 'BIOSIS' ENTERED AT 10:19:28 ON 30 AUG 2007
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CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

=> file registry
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 3.83 | 8.98 |

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 10:20:02 ON 30 AUG 2007
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STRUCTURE FILE UPDATES: 29 AUG 2007 HIGHEST RN 945828-45-5
DICTIONARY FILE UPDATES: 29 AUG 2007 HIGHEST RN 945828-45-5

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TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when
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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of

experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> S L1

SAMPLE SEARCH INITIATED 10:20:08 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 11 TO ITERATE

100.0% PROCESSED 11 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 22 TO 418

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> S L1 FAM FULL

FULL SEARCH INITIATED 10:20:51 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 117 TO ITERATE

100.0% PROCESSED 117 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

L3 1 SEA FAM FUL L1

=> D L3

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN

RN 246246-19-5 REGISTRY

ED Entered STN: 05 Nov 1999

CN 5-Heptenoic acid, 7-[(1R,2R,3S,5S)-2-[(1E,3R)-3-(2,3-dihydro-1H-inden-2-yl)-3-hydroxy-1-propenyl]-3-fluoro-5-hydroxycyclopentyl]-, (5Z)- (9CI)
(CA INDEX NAME)

OTHER NAMES:

CN AL 8810

FS STEREOSEARCH

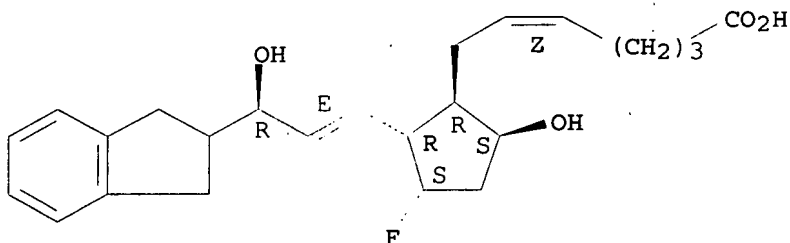
MF C24 H31 F O4

SR CA

LC STN Files: BIOSIS, CA, CAPLUS, CHEMCATS, CSCHEM, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1907 TO DATE)

10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 70.10 | 79.08 |

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 10:21:18 ON 30 AUG 2007
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FILE LAST UPDATED: 29 Aug 2007 (20070829/ED)

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=> file biosis uspat2 uspatfull
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.47 | 79.55 |

FULL ESTIMATED COST

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=> s L3
L4 18 L3

=> d L4 1-18

L4 ANSWER 1 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
AN 2007:217063 BIOSIS
DN PREV200700213501
TI Identification of an antagonist that selectively blocks the activity of prostamides (prostaglandin-ethanolamides) in the feline iris.
AU Woodward, D. F. [Reprint Author]; Krauss, A. H.; Wang, J. W.; Protzman, C. E.; Nieves, A. L.; Liang, Y.; Donde, Y.; Burk, R. M.; Landsverk, K.; Struble, C.
CS Allergen Inc, Dept Biol Sci, 2525 Dupont Dr, RD3-28, Irvine, CA 92612 USA
woodward_david@allergan.com
SO British Journal of Pharmacology, (FEB 2007) Vol. 150, No. 3, pp. 342-352.
CODEN: BJPCBM. ISSN: 0007-1188.
DT Article
LA English
ED Entered STN: 28 Mar 2007
Last Updated on STN: 11 Jul 2007

L4 ANSWER 2 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
AN 2006:568804 BIOSIS
DN PREV200600552624
TI Mechanisms regulating spontaneous contractions in the bovine epididymal
duct.
AU Mewe, Marco [Reprint Author]; Bauer, Christiane K.; Schwarz, Juergen R.;
Middendorff, Ralf
CS Univ Hamburg, Inst Angew Physiol, Univ Klinikum Hamburg Eppendorf,
Martinistr 52, D-20246 Hamburg, Germany
mewe@uke.uni-hamburg.de
SO Biology of Reproduction, (OCT 2006) Vol. 75, No. 4, pp. 651-659.
CODEN: BIREBV. ISSN: 0006-3363.
DT Article
LA English
ED Entered STN: 27 Oct 2006
Last Updated on STN: 27 Oct 2006

L4 ANSWER 3 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
AN 2006:177363 BIOSIS
DN PREV200600166856
TI Vasoactive responses of U46619, PGF(2 alpha), latanoprost, and travoprost
in isolated porcine ciliary arteries.
AU Vysniauskiene, Ineta; Allemann, Reto; Flammer, Josef; Haefliger, Ivan O.
[Reprint Author]
CS Univ Eye Clin, Lab Ocular Pharmacol and Physiol, Mittlere Str 91, POB,
CH-4012 Basel, Switzerland
SO IOVS, (JAN 2006) Vol. 47, No. 1, pp. 295-298.
CODEN: IOVSDA. ISSN: 0146-0404.
DT Article
LA English
ED Entered STN: 9 Mar 2006
Last Updated on STN: 9 Mar 2006

L4 ANSWER 4 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
AN 2005:506429 BIOSIS
DN PREV200510302094
TI Vasoactive responses of U46619, PGF2alpha, latanoprost, and travoprost in
isolated porcine ciliary arteries: Effect of SQ29548 and AL-8810.
AU Haefliger, I. O. [Reprint Author]; Vysniauskiene, I.; Flammer, J.
CS Univ Eye Clin, Lab Ocular Pharmacol and Physiol, Basel, Switzerland
SO IOVS, (APR 2004) Vol. 45, No. Suppl. 1, pp. U778.
Meeting Info.: Annual Meeting of the Association-for-Research-in-Vision-
and-Ophthalmology. Ft Lauderdale, FL, USA. April 24 -29, 2004. Assoc Res
Vis & Ophthalmol.
CODEN: IOVSDA. ISSN: 0146-0404.
DT Conference; (Meeting)
Conference; (Meeting Poster)
LA English
ED Entered STN: 23 Nov 2005
Last Updated on STN: 23 Nov 2005

L4 ANSWER 5 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
AN 2005:506423 BIOSIS
DN PREV200510302088
TI Human ciliary muscle cell FP prostaglandin receptor activation by
bimatoprost and other FP agonist prostaglandin analogues.
AU Sharif, N. A. [Reprint Author]; Crider, J.; Husain, S.; Ansari, H.;
Kaddour-Djebbar, I.; Abdel-Latif, A.
CS Alcon Res Ltd, Mol Pharmacol R219, Ft Worth, TX USA
SO IOVS, (APR 2004) Vol. 45, No. Suppl. 1, pp. U777.
Meeting Info.: Annual Meeting of the Association-for-Research-in-Vision-
and-Ophthalmology. Ft Lauderdale, FL, USA. April 24 -29, 2004. Assoc Res
Vis & Ophthalmol.
CODEN: IOVSDA. ISSN: 0146-0404.
DT Conference; (Meeting)

Conference; (Meeting Poster)
 LA English
 ED Entered STN: 23 Nov 2005
 Last Updated on STN: 23 Nov 2005

L4 ANSWER 6 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
 AN 2005:289224 BIOSIS
 DN PREV200510079859
 TI Acute effects of PGF(2 alpha) on MMP-2 secretion from human ciliary muscle cells: A PKC- and ERK-dependent process.
 AU Husain, Shahid [Reprint Author]; Jafri, Farahdiba; Crosson, Craig E.
 CS Storm Eye Inst, 167 Ashley Ave, Charleston, SC 29425 USA
 husain@musc.edu
 SO IOVS, (MAY 2005) Vol. 46, No. 5, pp. 1706-1713.
 CODEN: IOVSDA. ISSN: 0146-0404.
 DT Article
 LA English
 ED Entered STN: 4 Aug 2005
 Last Updated on STN: 4 Aug 2005

L4 ANSWER 7 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
 AN 2004:26014 BIOSIS
 DN PREV200400024400
 TI RHO KINASE AND CAT LOWER ESOPHAGEAL SPHINCTER (LES) TONE.
 AU Cao, Weibiao [Reprint Author]; Harnett, Karen M. [Reprint Author]; Cheng, Ling [Reprint Author]; Behar, Jose [Reprint Author]; Biancani, Piero [Reprint Author]
 CS Providence, RI, USA
 SO Digestive Disease Week Abstracts and Itinerary Planner, (2003) Vol. 2003, pp. Abstract No. S1139. e-file.
 Meeting Info.: Digestive Disease 2003. FL, Orlando, USA. May 17-22, 2003. American Association for the Study of Liver Diseases; American Gastroenterological Association; American Society for Gastrointestinal Endoscopy; Society for Surgery of the Alimentary Tract.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 31 Dec 2003
 Last Updated on STN: 31 Dec 2003

L4 ANSWER 8 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
 AN 2003:578306 BIOSIS
 DN PREV200300583842
 TI Human ciliary muscle cell responses to FP-class prostaglandin analogs: Phosphoinositide hydrolysis, intracellular Ca²⁺ mobilization and MAP kinase activation.
 AU Sharif, Naj A. [Reprint Author]; Crider, Julie Y.; Husain, Shahid; Kaddour-Djebbar, Ismail; Ansari, Habib R.; Abdel-Latif, Ata A.
 CS Alcon Research, Ltd., 6201 South Freeway, Fort Worth, TX, 76134-2099, USA
 naj.sharif@alconlab.com
 SO Journal of Ocular Pharmacology and Therapeutics, (October 2003) Vol. 19, No. 5, pp. 437-455. print.
 ISSN: 1080-7683.
 DT Article
 LA English
 ED Entered STN: 10 Dec 2003
 Last Updated on STN: 10 Dec 2003

L4 ANSWER 9 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
 AN 2002:514940 BIOSIS
 DN PREV200200514940
 TI Agonist activity of bimatoprost, travoprost, latanoprost, unoprostone isopropyl ester and other prostaglandin analogs at the cloned human ciliary body FP prostaglandin receptor.
 AU Sharif, N. A. [Reprint author]; Kelly, C. R.; Crider, J. Y.

CS Molecular Pharmacology Unit, Alcon Research, Ltd., 6201 South Freeway,
R2-19, Fort Worth, TX, 76134-2099, USA
naj.sharif@alconlabs.com

SO Journal of Ocular Pharmacology and Therapeutics, (August, 2002) Vol. 18,
No. 4, pp. 313-324. print.
ISSN: 1080-7683.

DT Article
LA English
ED Entered STN: 2 Oct 2002
Last Updated on STN: 5 Dec 2002

L4 ANSWER 10 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on
STN

AN 2002:143544 BIOSIS
DN PREV200200143544
TI Bimatoprost and its free acid are prostaglandin FP receptor agonists.
AU Sharif, Najam A. [Reprint author]; Williams, Gary W.; Kelly, Curtis R.
CS Molecular Pharmacology Unit, Alcon Research, Ltd., 6201 South Freeway,
Fort Worth, TX, 76134, USA
naj.sharif@alconlabs.com

SO European Journal of Pharmacology, (7 December, 2001) Vol. 432, No. 2-3,
pp. 211-213. print.
CODEN: EJPHAZ. ISSN: 0014-2999.

DT Article
LA English
ED Entered STN: 14 Feb 2002
Last Updated on STN: 26 Feb 2002

L4 ANSWER 11 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on
STN

AN 1999:439459 BIOSIS
DN PREV199900439459
TI AL-8810: A novel prostaglandin F2alpha analog with selective antagonist
effects at the prostaglandin F2alpha (FP) receptor.
AU Griffin, Brenda W.; Klimko, Peter; Crider, Julie Y.; Sharif, Najam A.
[Reprint author]
CS Molecular Pharmacology Unit, Alcon Laboratories, Inc., R2-19, 6201 South
Freeway, Fort Worth, TX, 76134-2099, USA

SO Journal of Pharmacology and Experimental Therapeutics, (Sept., 1999) Vol.
290, No. 3, pp. 1278-1284. print.
CODEN: JPETAB. ISSN: 0022-3565.

DT Article
LA English
ED Entered STN: 18 Oct 1999
Last Updated on STN: 18 Oct 1999

L4 ANSWER 12 OF 18 USPAT2 on STN

AN 2003:120891 USPAT2
TI 11 β -fluoro 15 β -hydroxy PGF2 α analogs as FP receptor
antagonists
IN Sharif, Najam A., Arlington, TX, United States
Griffin, Brenda W., Colleyville, TX, United States
PA Alcon Manufacturing, Ltd., Fort Worth, TX, United States (U.S.
corporation)
PI US 6649655 B2 20031118
AI US 2002-202230 20020724 (10)
RLI Continuation of Ser. No. US 1998-210976, filed on 14 Dec 1998, now
patented, Pat. No. US 6441033
PRAI US 1997-68468P 19971222 (60)
DT Utility
FS GRANTED
LN.CNT 845
INCL INCLM: 514/530.000
INCLS: 514/573.000
NCL NCLM: 514/530.000

NCLS: 514/573.000; 514/613.000; 514/659.000; 514/729.000

IC [7]

ICM A61K031-215

IPCI A61K0031-557 [ICM,7]

IPCI-2 A61K0031-215 [ICM,7]; A61K0031-21 [ICM,7,C*]

IPCR A61K0031-00 [I,C*]; A61K0031-00 [I,A]; A61K0031-185 [I,C*];
A61K0031-192 [I,A]; A61K0031-21 [I,C*]; A61K0031-216 [I,A];
A61K0031-557 [I,C*]; A61K0031-5575 [I,A]

EXF 514/530; 514/573

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 13 OF 18 USPATFULL on STN

AN 2007:5422 USPATFULL

TI Fp receptor antagonists or pgf2 alpha antagonists for treating
pathological conditions of the uterus

IN Jabbour, Henry Nicolas, Edinburgh, UNITED KINGDOM
Critchley, Hilary Octavia Dawn, Edinburgh, UNITED KINGDOM
Milne, Stuart Angus, Edinburgh, UNITED KINGDOM

PI US 2007004620 A1 20070104

AI US 2003-511480 A1 20030410 (10)
WO 2003-GB1521 20030410
20051115 PCT 371 date

PRAI GB 2002-8785 20020417

DT Utility

FS APPLICATION

LN.CNT 1547

INCL INCLM: 514/012.000
INCLS: 514/014.000; 514/015.000; 514/016.000; 514/573.000; 514/569.000;
514/613.000

NCL NCLM: 514/012.000
NCLS: 514/014.000; 514/015.000; 514/016.000; 514/569.000; 514/573.000;
514/613.000

IC IPCI A61K0038-17 [I,A]; A61K0038-10 [I,A]; A61K0038-08 [I,A];
A61K0031-557 [I,A]; A61K0031-16 [I,A]

IPCR A61K0038-17 [I,C]; A61K0038-17 [I,A]; A61K0009-00 [I,C*];
A61K0009-00 [I,A]; A61K0031-12 [I,C*]; A61K0031-12 [I,A];
A61K0031-16 [I,C]; A61K0031-16 [I,A]; A61K0031-4196 [I,C*];
A61K0031-4196 [I,A]; A61K0031-4406 [I,C*]; A61K0031-4406 [I,A];
A61K0031-557 [I,C]; A61K0031-557 [I,A]; A61K0031-5575 [I,A];
A61K0031-64 [I,C*]; A61K0031-64 [I,A]; A61K0038-04 [I,C*];
A61K0038-04 [I,A]; A61K0038-08 [I,C]; A61K0038-08 [I,A];
A61K0038-10 [I,C]; A61K0038-10 [I,A]; A61K0038-16 [I,C*];
A61K0038-16 [I,A]; A61K0039-395 [I,C*]; A61K0039-395 [I,A];
A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0045-06 [I,A];
A61P0015-00 [I,C*]; A61P0015-00 [I,A]; A61P0035-00 [I,C*];
A61P0035-00 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 14 OF 18 USPATFULL on STN

AN 2006:202061 USPATFULL

TI Ip receptor antagonists for the treatment of pathological uterine
conditions

IN Critchley, Hilary Octavia Dawn, Edinburg, UNITED KINGDOM
Jabbour, Henry Nicolas, Edinburgh, UNITED KINGDOM

PI US 2006171945 A1 20060803

AI US 2004-545478 A1 20040216 (10)
WO 2004-GB588 20040216
20050815 PCT 371 date

PRAI GB 2003-3430 20030214
GB 2003-15322 20030701

DT Utility

FS APPLICATION

LN.CNT 2468

INCL INCLM: 424/145.100
INCLS: 514/401.000; 514/235.500; 514/383.000; 514/573.000; 514/016.000;

514/017.000; 514/013.000; 514/014.000; 514/015.000; 514/456.000
NCL NCLM: 424/145.100
NCLS: 514/013.000; 514/014.000; 514/015.000; 514/016.000; 514/017.000;
514/235.500; 514/383.000; 514/401.000; 514/456.000; 514/573.000
IC IPCI A61K0039-395 [I,A]; A61K0038-10 [I,A]; A61K0038-08 [I,A];
A61K0031-5377 [I,A]; A61K0031-5375 [I,C*]; A61K0031-4196 [I,A];
A61K0031-557 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 15 OF 18 USPATFULL on STN

AN 2006:196116 USPATFULL

TI Fp receptor antagonists or pgf2 alpha antagonists for treating
menorrhagia

IN Jabbour, Henry Nicolas, Edinburgh, UNITED KINGDOM

Critchley, Hilary Octavia Dawn, Edinburgh, UNITED KINGDOM

Milne, Stuart Angus, Edinburgh, UNITED KINGDOM

PI US 2006166872 A1 20060727

AI US 2003-511484 A1 20030410 (10)

WO 2003-GB1536 20030410

20051021 PCT 371 date

PRAI GB 2002-8785 20020417

GB 2002-8783 20020417

DT Utility

FS APPLICATION

LN.CNT 1557

INCL INCLM: 514/012.000

INCLS: 514/013.000; 514/014.000; 514/015.000; 514/016.000; 514/573.000

NCL NCLM: 514/012.000

NCLS: 514/013.000; 514/014.000; 514/015.000; 514/016.000; 514/573.000

IC IPCI A61K0038-10 [I,A]; A61K0038-08 [I,A]; A61K0031-557 [I,A]

IPCR A61F0013-20 [I,C*]; A61F0013-20 [I,A]; A61K0038-10 [I,A];

A61K0009-00 [I,C*]; A61K0009-00 [I,A]; A61K0031-557 [I,C];

A61K0031-557 [I,A]; A61K0038-04 [I,C*]; A61K0038-04 [I,A];

A61K0038-08 [I,C]; A61K0038-08 [I,A]; A61K0038-10 [I,C];

A61K0038-16 [I,C*]; A61K0038-16 [I,A]; A61K0038-17 [I,C*];

A61K0038-17 [I,A]; A61K0039-395 [I,C*]; A61K0039-395 [I,A];

A61K0045-00 [I,C*]; A61K0045-00 [I,A]; A61K0045-06 [I,A];

A61M0031-00 [I,C*]; A61M0031-00 [I,A]; A61P0015-00 [I,C*];

A61P0015-00 [I,A]; A61P0015-08 [I,A]; A61P0043-00 [I,C*];

A61P0043-00 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 16 OF 18 USPATFULL on STN

AN 2006:190559 USPATFULL

TI Embryo development and survival

IN Schrick, F. Neal, Knoxville, TN, UNITED STATES

PA University of Tennessee Research Foundation (U.S. corporation)

PI US 2006162003 A1 20060720

AI US 2005-39662 A1 20050119 (11)

DT Utility

FS APPLICATION

LN.CNT 714

INCL INCLM: 800/015.000

INCLS: 800/021.000

NCL NCLM: 800/015.000

NCLS: 800/021.000

IC IPCI A01K0067-027 [I,A]

IPCR A01K0067-027 [I,A]; A01K0067-027 [I,C]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 17 OF 18 USPATFULL on STN

AN 2003:120891 USPATFULL

TI 11Beta-fluoro 15beta-hydroxy PGF2alpha analogs as FP receptor
antagonists

IN Sharif, Najam A., Arlington, TX, UNITED STATES

Griffin, Brenda W., Colleyville, TX, UNITED STATES
 PI US 2003083375 A1 20030501
 US 6649655 B2 20031118
 AI US 2002-202230 A1 20020724 (10)
 RLI Continuation of Ser. No. US 1998-210976, filed on 14 Dec 1998, GRANTED,
 Pat. No. US 6441033
 PRAI US 1997-68468P 19971222 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 754
 INCL INCLM: 514/530.000
 INCLS: 514/573.000; 514/659.000; 514/613.000; 514/729.000
 NCL NCLM: 514/530.000
 NCLS: 514/573.000; 514/613.000; 514/659.000; 514/729.000
 IC [7]
 ICM A61K031-557
 IPCI A61K0031-557 [ICM,7]
 IPCI-2 A61K0031-215 [ICM,7]; A61K0031-21 [ICM,7,C*]
 IPCR A61K0031-00 [I,C*]; A61K0031-00 [I,A]; A61K0031-185 [I,C*];
 A61K0031-192 [I,A]; A61K0031-21 [I,C*]; A61K0031-216 [I,A];
 A61K0031-557 [I,C*]; A61K0031-5575 [I,A]
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 18 OF 18 USPATFULL on STN
 AN 2002:217306 USPATFULL
 TI 11 β -fluoro 15 β -hydroxy PGF2 α analogs as FP receptor
 antagonists
 IN Sharif, Najam A., Arlington, TX, United States
 Griffin, Brenda W., Colleyville, TX, United States
 PA Alcon Manufacturing, Ltd., Fort Worth, TX, United States (U.S.
 corporation)
 PI US 6441033 B1 20020827
 AI US 1998-210976 19981214 (9)
 PRAI US 1997-68468P 19971222 (60)
 DT Utility
 FS GRANTED
 LN.CNT 807
 INCL INCLM: 514/530.000
 INCLS: 514/573.000
 NCL NCLM: 514/530.000
 NCLS: 514/573.000
 IC [7]
 ICM A61K031-215
 IPCI A61K0031-215 [ICM,7]; A61K0031-21 [ICM,7,C*]
 IPCR A61K0031-00 [I,C*]; A61K0031-00 [I,A]; A61K0031-185 [I,C*];
 A61K0031-192 [I,A]; A61K0031-21 [I,C*]; A61K0031-216 [I,A];
 A61K0031-557 [I,C*]; A61K0031-5575 [I,A]
 EXF 514/530; 514/573
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

35.07

114.62

STN INTERNATIONAL LOGOFF AT 10:25:47 ON 30 AUG 2007

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| NEWS | 3 | MAY 08 | CA/CAPLUS Indian patent publication number format defined |
| NEWS | 4 | MAY 14 | RDISCLOSURE on STN Easy enhanced with new search and display fields |
| NEWS | 5 | MAY 21 | BIOSIS reloaded and enhanced with archival data |
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| NEWS | 13 | JUL 02 | LMEDLINE coverage updated |
| NEWS | 14 | JUL 02 | SCISEARCH enhanced with complete author names |
| NEWS | 15 | JUL 02 | CHEMCATS accession numbers revised |
| NEWS | 16 | JUL 02 | CA/CAPLUS enhanced with utility model patents from China |
| NEWS | 17 | JUL 16 | CAPLUS enhanced with French and German abstracts |
| NEWS | 18 | JUL 18 | CA/CAPLUS patent coverage enhanced |
| NEWS | 19 | JUL 26 | USPATFULL/USPAT2 enhanced with IPC reclassification |
| NEWS | 20 | JUL 30 | USGENE now available on STN |
| NEWS | 21 | AUG 06 | CAS REGISTRY enhanced with new experimental property tags |
| NEWS | 22 | AUG 06 | BEILSTEIN updated with new compounds |
| NEWS | 23 | AUG 06 | FSTA enhanced with new thesaurus edition |
| NEWS | 24 | AUG 13 | CA/CAPLUS enhanced with additional kind codes for granted patents |
| NEWS | 25 | AUG 20 | CA/CAPLUS enhanced with CAS indexing in pre-1907 records |
| NEWS | 26 | AUG 27 | Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB |
| NEWS | 27 | AUG 27 | USPATOLD now available on STN |
| NEWS | 28 | AUG 28 | CAS REGISTRY enhanced with additional experimental spectral property data |
| NEWS EXPRESS | 29 | JUNE 2007: | CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007. |
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=> File caplus medline biosis

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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FILE 'BIOSIS' ENTERED AT 10:27:20 ON 30 AUG 2007

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=> e prostaglandin

| | | |
|-----|------------|-----------------------------|
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| E2 | 1 | PROSTAGLANDIM/BI |
| E3 | 239123 --> | PROSTAGLANDIN/BI |
| E4 | 1 | PROSTAGLANDINOMEDIATION/BI |
| E5 | 21 | PROSTAGLANDIN1/BI |
| E6 | 22 | PROSTAGLANDIN2/BI |
| E7 | 1 | PROSTAGLANDIN2A/BI |
| E8 | 4 | PROSTAGLANDIN2ALPHA/BI |
| E9 | 332 | PROSTAGLANDINA/BI |
| E10 | 2 | PROSTAGLANDINA2/BI |
| E11 | 1 | PROSTAGLANDINABKOMMLINGE/BI |
| E12 | 2 | PROSTAGLANDINABORT/BI |

=> s (prostaglandin or FP) antagonist

MISSING OPERATOR FP) ANTAGONIST

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s (prostaglandin or FP) (A) antagonist

L1 3268 (PROSTAGLANDIN OR FP) (A) ANTAGONIST

=> S L1 and uterus

L2 192 L1 AND UTERUS

=> S L1 (S) uterus

L3 18 L1 (S) UTERUS

=> S L1 (S) (endometriosis or fibroids)

L4 0 L1 (S) (ENDOMETRIOSIS OR FIBROIDS)

=> S L1 (S) fibroids

L5 0 L1 (S) FIBROIDS

=> D L3 1

L3 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:707249 CAPLUS

DN 145:117453

TI Embryo development and survival

IN Schrick, F. Neal

PA University of Tennessee Research Foundation, USA

SO U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|--|----------|-----------------|----------|
| PI | US 2006162003 | A1 | 20060720 | US 2005-39662 | 20050119 |
| | WO 2006078535 | A2 | 20060727 | WO 2006-US1091 | 20060113 |
| | WO 2006078535 | A3 | 20061214 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| PRAI | US 2005-39662 | A | 20050119 | | |

=> D L3 1 ibib abs

L3 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:707249 CAPLUS
DOCUMENT NUMBER: 145:117453
TITLE: Embryo development and survival
INVENTOR(S): Schrick, F. Neal
PATENT ASSIGNEE(S): University of Tennessee Research Foundation, USA
SOURCE: U.S. Pat. Appl. Publ., 8 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|---------------|--|----------|-----------------|----------|
| | US 2006162003 | A1 | 20060720 | US 2005-39662 | 20050119 |
| | WO 2006078535 | A2 | 20060727 | WO 2006-US1091 | 20060113 |
| | WO 2006078535 | A3 | 20061214 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |

PRIORITY APPLN. INFO.: US 2005-39662 A 20050119
AB An embryo that is transferred into the uterus of a recipient female is protected from embryotoxic effects of prostaglandin F2 α by exposing the embryo to a prostaglandin antagonist.

=> D L3 1-18 IBIB abs

L3 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:707249 CAPLUS
 DOCUMENT NUMBER: 145:117453
 TITLE: Embryo development and survival
 INVENTOR(S): Schrick, F. Neal
 PATENT ASSIGNEE(S): University of Tennessee Research Foundation, USA
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 2006162003 | A1 | 20060720 | US 2005-39662 | 20050119 |
| WO 2006078535 | A2 | 20060727 | WO 2006-US1091 | 20060113 |
| WO 2006078535 | A3 | 20061214 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

PRIORITY APPLN. INFO.: US 2005-39662 A 20050119

AB An embryo that is transferred into the uterus of a recipient female is protected from embryotoxic effects of prostaglandin F2 α by exposing the embryo to a prostaglandin antagonist.

L3 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:855824 CAPLUS
 DOCUMENT NUMBER: 139:354461
 TITLE: FP receptor antagonists or PGF2 α antagonists for treating pathological conditions of the uterus
 INVENTOR(S): Milne, Stuart Angus; Jabbour, Henry Nicolas
 PATENT ASSIGNEE(S): Medical Research Council, UK
 SOURCE: PCT Int. Appl., 59 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2003089001 | A1 | 20031030 | WO 2003-GB1521 | 20030410 |
| WO 2003089001 | A8 | 20040205 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003217066 | A1 | 20031103 | AU 2003-217066 | 20030410 |
| EP 1511514 | A1 | 20050309 | EP 2003-712454 | 20030410 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 JP 2005537225 T 20051208 JP 2003-585752 20030410
 US 2007004620 A1 20070104 US 2005-511480 20051115
 PRIORITY APPLN. INFO.: GB 2002-8785 A 20020417
 WO 2003-GB1521 W 20030410

AB A method of treating or preventing a pathol. condition of the uterus in a female individual comprises administering to the individual at least one agent that prevents PGF2 α having its effect on the FP receptor. Typically, the pathol. condition is uterine cancer, fibroids or endometriosis. For example, a patient suffering from uterine cancer was administered a FP receptor antagonist AL-3138 or AL-8810 and an EP2 receptor antagonist AH-6809 at a dosing quantity and frequency such as that the therapeutic level of active agent at the site of treatment was maintained at a level ideally EC90 but preferably not less than EC50 throughout the treatment period. The treatment was delivered orally or more locally depending on patient acceptability, avoidance of side effects, and systemic bioavailability.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:794594 CAPLUS
 DOCUMENT NUMBER: 138:297521
 TITLE: Effect of polyphlorethin phosphate on the response of non-gravid rat uterus to "folkloric" and "standard" oxytocics in vitro
 AUTHOR(S): Adebiyi, A.; Prasad, R. N. V.; Adaikan, P. G.
 CORPORATE SOURCE: Department of Obstetrics and Gynaecology, National University of Singapore, Singapore, 119260, Singapore
 SOURCE: Prostaglandins, Leukotrienes and Essential Fatty Acids (2002), 66(5&6), 499-503
 CODEN: PLEAEU; ISSN: 0952-3278
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Polyphlorethin phosphate (PPP) was reported by previous workers to be a specific antagonist of prostaglandin (PGE1, PGE2 & PGF2 α)-induced contractions of isolated jird colon, gerbil colon, guinea pig ileum, and rabbit jejunum. In the present study, the authors examined the effect of PPP on utero-tonic activities of crude papaya latex (a folkloric oxytocic), PGF2 α , oxytocin, acetylcholine, and 5-hydroxytryptamine (standard oxytocics) on non-gravid, estrogen-primed (50 μ g/kg) rats in vitro. The effect of PPP on the oxytocics was evaluated qual. by incubating the tissues in PPP (25 - 400 μ g/mL) for 20 min prior to the addition of a constant concentration of each oxytocic. PPP concentration

independently inhibited the contractile response of the uterine muscles to all the oxytocics. The inhibition was reversible after washing out the drugs. Results of the present study suggest that PPP is a non-specific and reversible antagonist of the response of non-gravid rat uterine smooth muscle to oxytocics in vitro. The specificity of PPP as a prostaglandin antagonist could therefore be species/tissue dependent.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:605357 CAPLUS
 DOCUMENT NUMBER: 113:205357
 TITLE: Comparison of antiprogesterin stimulation of uterine prostaglandin synthesis in vitro
 AUTHOR(S): Brooks, J.; Holland, P.; Kelly, R.
 CORPORATE SOURCE: Cent. Reprod. Biol., Univ. Edinburgh, Edinburgh, EH3 9EW, UK
 SOURCE: Prostaglandins, Leukotrienes and Essential Fatty Acids (1990), 40(3), 191-7

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Progesterone has an inhibitory effect on prostaglandin (PG) synthesis in uterine tissue, and this effect is reversible with progesterone receptor antagonists. Although antiprogesterone steroids, such as RU 486 (Mifepristone), are effective at inducing abortion in women, they have an improved efficacy when used with exogenous synthetic prostaglandin. In the guinea pig such antagonists sensitize the uterus but do not result in increased myometrial activity and therefore may not induce endogenous PG synthesis. In this study the effects of antiprogestins on a preparation of rat uterus perfused with progesterone were studied. ZK 98734 caused a rapid and sustained increase in 6-oxoPGF synthesis which rose within the first 90 min. This rapid response suggested that some mechanism other than the induction of fresh protein synthesis was involved. A similar increase was not seen with pregnant guinea pig myometrium/decidua perfused in a similar manner, suggesting that some other mechanism was responsible for the relatively low PG production in pregnancy. However increases in 6-oxoPGF in response to antiprogestins were recorded when pregnant guinea pig decidua/myometrium was incubated for 4 h. In these expts. 1 μ M ZK 98734 and 1 μ M ZK 98299 (Onapristone) gave a 2.7-fold increase in PG production, whereas RU 486 gave a 1.6-fold increase. Both 1 μ M ZK 98734 AND 1 μ M ZK 98299 also gave a significant increase in PGE production but no increase in PGF was observed. These findings suggest that some antiprogestins might have a better effect on the stimulation of endogenous PG synthesis or on the rate of catabolism of prostanoids.

L3 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:109078 CAPLUS

DOCUMENT NUMBER: 110:109078

TITLE: Fertility control and uterine therapy in dogs with luteinizing hormone releasing hormone antagonists

INVENTOR(S): Vickery, Brian H.

PATENT ASSIGNEE(S): Syntex (U.S.A.), Inc., USA

SOURCE: Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 268066 | A2 | 19880525 | EP 1987-114868 | 19871012 |
| EP 268066 | A3 | 19900711 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| AU 8779814 | A | 19880421 | AU 1987-79814 | 19871015 |

PRIORITY APPLN. INFO.: US 1986-920483 A 19861017

AB An effective amount of an LH-RH antagonist is administered to female dogs to control fertility and to treat hormonally-mediated uterine infections. Beagle bitches were mated and treated on day 1 or 2 of gestation with a low dose of [N-Ac-D-Nal(2)1, D-p-Cl-Phe2, D-Trp3, D-Deh6, D-Ala10]LH-RH (I; 2 mg/kg) alone, a low dose of d, 1 9 α ,11 α ,15 α -trihydroxy-16-phenoxo-17,18,1,20-tetranoprosta-4,5,13-transtrienoic acid n-Pr ester (20 μ g/kg) alone, or with a combination of the same low doses of both agents. Pregnancy continued for both agents given alone but was terminated with the combination. A pharmaceutical composition for s.c. injection contains I acetate salt 10.0, benzyl alc. 9.0, glacial HOAc 1.2, propylene glycol 200.0, mannitol 35.0 mg, and sterile H₂O 1.0 mL.

L3 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:418764 CAPLUS

DOCUMENT NUMBER: 105:18764

TITLE: The stimulation of prostaglandin production by two antiprogesterone steroids in human endometrial cells

AUTHOR(S): Kelly, R. W.; Healy, D. L.; Cameron, M. J.; Cameron, I. T.; Baird, D. T.
CORPORATE SOURCE: Cent. Reprod. Biol., Univ. Edinburgh, Edinburgh, EH3 9EW, UK
SOURCE: Journal of Clinical Endocrinology and Metabolism (1986), 62(6), 1116-23
CODEN: JCEMAZ; ISSN: 0021-972X

DOCUMENT TYPE: Journal
LANGUAGE: English

AB When endometrial stromal cells and isolated endometrial glands obtained from women during days 6-26 of the ovarian cycle were cultured for 24 h in the presence of the progestogen antagonists RU 486 [84371-65-3] and ZK 98734 [96285-52-8], both steroids stimulated PGF2 α [551-11-1] production by stromal cells in a dose-dependent manner, in doses ranging from 10-1000 nM. Progesterone [57-83-0] (100 nM) inhibited RU 486 stimulation, except at the highest dose of antiprogesterin. PGE2 [363-24-6] was produced in smaller amts. than PGF2 α , but, when measurable, it also increased in the presence of RU 486. In contrast, RU 486 did not increase prostaglandin (PG) production by endometrial glands. In an experiment to determine the effect of pretreatment, stromal cells were incubated for 24 h with 1000 nM progesterone or RU 486 (all with 100 nM 17 β -estradiol) with either 30 or 6 μ M arachidonic acid. These 6 batches of cells were incubated for a 2nd 24 h with either progesterone or antiprogesterin. Cells pretreated with the higher dose of arachidonic acid had a marked increase in PGF2 α production during the 2nd 24 h only when also pretreated with progesterone. Pretreatment with progesterone also allowed a greater conversion of PG to its 13,14-dihydro-15-keto metabolite. Antiprogesterone steroids may act as menstrual regulators by stimulating endogenous PG production within the endometrial stromal cells and inhibiting PG catabolism.

L3 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1982:466680 CAPLUS
DOCUMENT NUMBER: 97:66680
TITLE: Antioxytotic and antiprostaglandin-releasing effects of oxytocin antagonists in pregnant rats and pregnant human myometrial strips
AUTHOR(S): Chan, W. Y.; Powell, Andrea M.; Hruby, Victor J.
CORPORATE SOURCE: Med. Coll., Cornell Univ., New York, NY, 10021, USA
SOURCE: Endocrinology (1982), 111(1), 48-54
CODEN: ENDOAO; ISSN: 0013-7227

DOCUMENT TYPE: Journal
LANGUAGE: English

AB Two highly potent oxytocin (OT) [50-56-6] antagonists, 1-penicillamine,4-threonine]OT ([Pen1,Thr4]OT) [78578-24-2] and [1-penicillamine,2-phenylalanine,4-threonine]OT ([Pen1,Phe2,Thr4]OT) [78578-27-5] were examined for their antioxytotic activity in 21-22-day-pregnant rats and on isolated human myometrial strips obtained from term pregnant patients at cesarean section for childbirth. Their effects on prostaglandin (PG) synthesis and OT-stimulated PG synthesis in uterine slices from pregnant rats were also studied. The OT antagonists were effective inhibitors of the OT responses in pregnant rats and on pregnant human myometrial strips. The 2 OT antagonists has no agonistic activity on PG release at a dose range that was antioxytotic. When administered together with OT, the PG-releasing action of OT was inhibited. Thus, [Pen1,Thr4]OT and [Pen1,Phe2,Thr4]OT are effective inhibitors of both the uterotonic and PG-releasing actions of OT.

L3 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1982:15378 CAPLUS
DOCUMENT NUMBER: 96:15378
TITLE: Reduction of fertility of mice by the intrauterine injection of prostaglandin antagonists
AUTHOR(S): Biggers, J. D.; Baskar, J. F.; Torchiana, D. F.

CORPORATE SOURCE: Dep. Physiol., Harvard Med. Sch., Boston, MA, 02115, USA
SOURCE: Journal of Reproduction and Fertility (1981), 63(2), 365-72
CODEN: JRPFA4; ISSN: 0022-4251

DOCUMENT TYPE: Journal
LANGUAGE: English

AB The intrauterine injection of 7-oxa-13-prostynoic acid [27166-04-7], 18,18,20-trimethyl PGE-2 [80003-51-6], and meclofenamic acid [644-62-2] in mice at the expected times of implantation reduced the number of implantation sites. Indomethacin was ineffective possibly because it was exposed to high pH during the preparation of the solns. for injection. Apparently, these prostaglandin antagonists exert their antifertility action at multiple sites involving both the embryo and mother.

L3 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1982:814 CAPLUS
DOCUMENT NUMBER: 96:814
TITLE: Effect of a prostaglandin antagonist, N-0164, on cAMP generation and hydrolysis in the rat uterus

AUTHOR(S): Vulliemoz, Yvonne; Verosky, Mariagnes; Triner, Lubos
CORPORATE SOURCE: Dep. Anesthesiol., Columbia Univ., New York, NY, 10032, USA

SOURCE: Biochemical Pharmacology (1981), 30(14), 1941-6
CODEN: BCPCA6; ISSN: 0006-2952

DOCUMENT TYPE: Journal
LANGUAGE: English

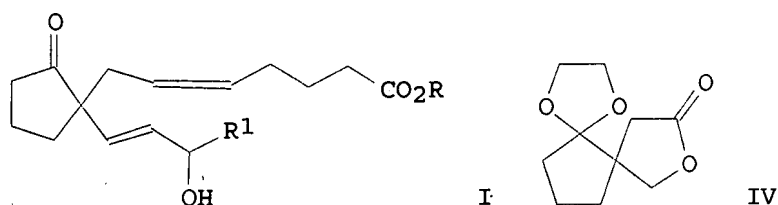
AB PGE2 [363-24-6] Inhibition of dl-isoproterenol-HCl [949-36-0]-induced cyclic AMP [60-92-4] accumulation in the rat uterus was reversed by N-0164 [60787-00-0] (ED50 60µM). At this concentration, N-0164 inhibited cyclic AMP phosphodiesterase [9036-21-9] in broken cell preps. (ED50 50µM). Theophylline abolished the inhibitory effect of N-0164 on responses to PGE2. The reversal by N-0164 of the PGE2 effect on the cyclic AMP response to isoproterenol was therefore, not due to its prostaglandin antagonistic action, but to inhibition of cyclic AMP-phosphodiesterase. At lower concns., N-0164 selectively inhibited the PGE2-induced contractions of rat uterus (ED50 4µM); the carbachol-induced contractions were inhibited by only 25% by 10mM N-0164. In the rat uterus, N-0164 has therefore at least 2 effects: prostaglandin antagonism and cyclic AMP phosphodiesterase inhibition. The contractile effect of PGE2 was probably dependent on the effect of PGE2 on the isoproterenol-induced rise in cyclic AMP.

L3 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1981:102885 CAPLUS
DOCUMENT NUMBER: 94:102885
TITLE: C-8-Quaternary prostaglandin analogs
AUTHOR(S): Temesvari-Major, E.; Gruber, L.; Tomoskozi, I.; Kovacs, G.; Cseh, G.
CORPORATE SOURCE: Cent. Res. Inst. Chem., Budapest, H-1525, Hung.
SOURCE: Tetrahedron Letters (1980), 21(41), 4035-8
CODEN: TELEAY; ISSN: 0040-4039

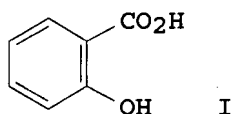
DOCUMENT TYPE: Journal
LANGUAGE: English

GI



AB A simple and convenient preparation of 11 prostaglandin analogs e.g. I [R = H, R₁ = pentyl (II), hexyl (III)] from the spiro lactone IV, prepared in good yield from 2-ethoxycarbonylcyclopentanone by sequential alkylation, ketalization, hydrolysis, cyclization, and reduction, is reported. II and III are active prostaglandin antagonists in mouse and rat uteri.

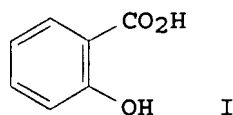
L3 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1978:131081 CAPLUS
 DOCUMENT NUMBER: 88:131081
 TITLE: Inhibition of the contraction activity in the time of delivery by prostaglandin antagonists
 AUTHOR(S): Kiss, Cs.; Gyory, G.; Benyo, T.; Bagdany, S.; Kurcz, M.; Virag, S.
 CORPORATE SOURCE: Dep. Obstet. Gynecol., Postgrad. Med. Sch., Budapest, Hung.
 SOURCE: Congr. Hung. Pharmacol. Soc., [Proc.] (1976), Volume Date 1974, 2(2, Symp. Prostaglandins), 135-8
 CODEN: CPSPDT
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB In pregnant women in labor, Na salicylate (I Na salt) [54-21-7] inhibited uterus contractions. This effect occurred after 1-1.5 h and lasted 4-6 h. The treatment was successful in 17 cases, whereas in 4 cases, uterus contraction was not diminished. After a 4-6-h pause in contractions, uterine contractions started again their intensity was normal, and the delivery was normal. No fetal asphyxia was observed. The use of prostaglandin antagonists to inhibit uterus contractions and thus to delay delivery is discussed.

L3 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1978:131080 CAPLUS
 DOCUMENT NUMBER: 88:131080
 TITLE: The inhibition of contraction activity of the pregnant uterus by prostaglandin antagonists
 AUTHOR(S): Gyory, G.; Kiss, C.; Benyo, T.; Bagdany S.; Szalay, J.; Kurcz, M.; Virag, S.
 CORPORATE SOURCE: Dep. Gynecol. Obstet., Postgrad. Med. Sch., Budapest, Hung.
 SOURCE: Congr. Hung. Pharmacol. Soc., [Proc.] (1976), Volume Date 1974, 2(2, Symp. Prostaglandins), 131-4
 CODEN: CPSPDT
 DOCUMENT TYPE: Journal

LANGUAGE: English
GI

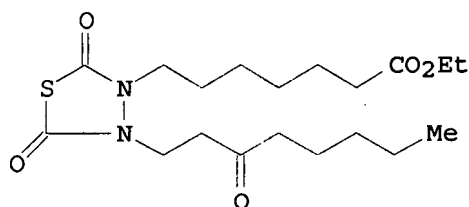


AB In pregnant women with threatening and habitual premature delivery or abortion, Na salicylate (I Na salt) [54-21-7] inhibited uteruscontraction. I was able to prevent premature delivery or abortion in most of the patients in which it was tested. The use of prostaglandin antagonists for the prevention of premature delivery or abortion is discussed.

L3 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:551763 CAPLUS
DOCUMENT NUMBER: 87:151763
TITLE: 3,4-Disubstituted-1,3,4-thiadiazoline-2,5-diones
INVENTOR(S): Scribner, Richard Merrill
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: U.S., 26 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| US 4032533 | A | 19770628 | US 1976-659511 | 19760219 |
| PRIORITY APPLN. INFO.: | | | US 1976-659511 | A 19760219 |

GI



AB Several 1,3,4-thiadiazolidine analogs of prostaglandins were prepared Thus, 2-methoxy-1,3,4-thiadiazol-5(4H)-one was hydrolyzed to the diketone, which with Et 7-bromo- or -iodoheptanoate gave the heptanoate ester; this with CH₂:CHCOC₅H₁₁ and PhCH₂NMe₃OH gave I, which with NaBH₄ gave the side-chain secondary alc. (IIa). The Me₃C ester (IIb) and the free acid (IIc) analogs were also prepared IIa-c had prostaglandin antagonist activity toward rat uterus; IIa and IIc had antiinflammatory activity; IIc induced contractions in rat stomach.

L3 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:133301 CAPLUS
DOCUMENT NUMBER: 82:133301
TITLE: Effects of prostaglandin inhibitors on angiotensin, oxytocin, and prostaglandin F₂α contractile effects on the rat uterus during the estrous cycle
AUTHOR(S): Baudouin-Legros, Maryvonne; Meyer, P.; Worcel, M.
CORPORATE SOURCE: Unit Rech. Physiol. Pharmacol. Vasc. Renale, INSERM

U7, Paris, Fr.
SOURCE: British Journal of Pharmacology (1974), 52(3), 393-9
CODEN: BJPCBM; ISSN: 0007-1188
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The increased spontaneous contractions and contractile sensitivity to Hypertensin [53-73-6] and oxytocin [50-56-6] in rat isolated uterus in di- and proestrus were abolished by indomethacin and polyphlorethin phosphate. The maximum sensitivity of the uterus to PGF2 α [551-11-1] was not affected by the prostaglandin antagonists. Apparently, contractions occurring spontaneously or induced by Hypertensin and oxytocin were mediated by endogenous prostaglandin synthesis, whereas those produced by exogenous PGF2 α were not. PGF2 α induced the appearance of contractions in the relatively quiescent metestrous uterus and potentiated Hypertensin-elicited contractions which persisted even after washing out PGF2 α .

L3 ANSWER 15 OF 18 MEDLINE on STN
ACCESSION NUMBER: 81281999 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6268114
TITLE: Effect of a prostaglandin antagonist, N-0164, on cAMP generation and hydrolysis in the rat uterus.
AUTHOR: Vulliemoz Y; Verosky M; Triner L
SOURCE: Biochemical pharmacology, (1981 Jul 15) Vol. 30, No. 14, pp. 1941-6.
Journal code: 0101032. ISSN: 0006-2952.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198110
ENTRY DATE: Entered STN: 16 Mar 1990
Last Updated on STN: 6 Feb 1998
Entered Medline: 25 Oct 1981

L3 ANSWER 16 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1982:145295 BIOSIS
DOCUMENT NUMBER: PREV198273005279; BA73:5279
TITLE: EFFECT OF A PROSTAGLANDIN ANTAGONIST N-0164 SODIUM P BENZYL-4-1-OXO-2-4-CHLOROBENZYL-3-PHENYLPROPYL PHENYL PHOSPHONATE ON CYCLIC AMP GENERATION AND HYDROLYSIS IN THE RAT UTERUS.
AUTHOR(S): VULLIEMOZ Y [Reprint author]; VEROSKY M; TRINER L
CORPORATE SOURCE: DEP ANESTHIOLOGICAL, COLL PHYSICIANS SURG, 630 W 168TH ST, NEW YORK, NY 10032, USA
SOURCE: Biochemical Pharmacology, (1981) Vol. 30, No. 14, pp. 1941-1946.
CODEN: BCPCA6. ISSN: 0006-2952.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB N-0164 (sodium-p-benzyl-4-[1-oxo-2-(4-chlorobenzyl)-3-phenylpropyl]phenylphosphonate) (20-100 μ M), an antagonist of the contractile effect of prostaglandins, [PG], reversed the PGE2 inhibition of isoproterenol-induced cAMP accumulation in rat uterus. N-0164, at the same concentrations, was a potent cAMP-phosphodiesterase inhibitor in broken cell preparations and potentiated the cAMP response to isoproterenol in intact tissue. The potency of N-0164 to inhibit cAMP-phosphodiesterase and to reverse the effect of PGE2 on the cAMP response to isoproterenol were comparable (EC50[median effective concentration]: 50 and 60 μ M, respectively). In the presence of 10 mM theophylline, N-0164 did not affect the inhibitory effect of PGE2. N-0164

produced similar proportional increases in the cAMP response to isoproterenol in the presence and absence of PGE2. The apparent reversal N-1064 of the PGE2 effect on the cAMP response to isoproterenol is not due to its PG antagonistic action but to inhibition of cAMP-phosphodiesterase. N-1064, at concentrations lower than those inhibiting cAMP-phosphodiesterase, selectively inhibited the PGE2-induced contractions of the rat uterus (EC50, 4 μ M), while at higher concentrations it diminished carbachol-induced contractions. In the rat uterus N-1064 has at least 2 effects, PG antagonism and cAMP-phosphodiesterase inhibition, and the contractile effect of PGE2 may be independent of the effect of PGE2 on the isoproterenol-induced rise in cAMP.

L3 ANSWER 17 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1978:41775 BIOSIS
DOCUMENT NUMBER: PREV197814041775; BR14:41775
TITLE: THE EFFECT OF A PROSTAGLANDIN ANTAGONIST
N-0164 SODIUM P BENZYL-4-1-OXO-2-4-CHLOROBENZYL-3-PHENYLPROPYLPHENYL PHOSPHONATE ON CONTRACTILITY AND THE CYCLIC AMP SYSTEM OF RAT UTERUS.
AUTHOR(S): VULLIEMOZ Y; VEROSKY M; TRINER L
SOURCE: Federation Proceedings, (1978) Vol. 37, No. 3, pp. 391.
CODEN: FEPA7. ISSN: 0014-9446.
DOCUMENT TYPE: Article
FILE SEGMENT: BR
LANGUAGE: Unavailable

L3 ANSWER 18 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1976:96182 BIOSIS
DOCUMENT NUMBER: PREV197612096182; BR12:96182
TITLE: THE INHIBITION OF THE CONTRACTIONS OF THE PREGNANT UTERUS BY PROSTAGLANDIN ANTAGONISTS.
AUTHOR(S): GYORY G; KISS C
SOURCE: (1976) pp. 995. SAMUELSSON, BENGT AND RODOLFO PAOLETTI (ED.). ADVANCES IN PROSTAGLANDIN AND THROMBOXANE RESEARCH, VOL. 2. PROCEEDINGS OF INTERNATIONAL CONFERENCE. FLORENCE, ITALY. MAY 1975. XVI+522P. ILLUS. RAVEN PRESS: NEW YORK, N.Y., U.S.A. ISBN 0-89004-050-8.
DOCUMENT TYPE: Book
FILE SEGMENT: BR
LANGUAGE: Unavailable

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